FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In The Matter Of	)	
	)	
Joint Applications of	)	
AT&T Corporation and	)	
Tele-Communications, Inc. for	)	CS Docket No. 98-178
Transfer of Control to AT&T	)	
of Licenses and Authorizations	)	
Held by TCI and Its Affiliates or	)	
Subsidiaries	)	

To: The Commission

COMMENTS OF AMERICA ONLINE, INC.

George Vradenburg, III
William W. Burrington
Jill A. Lesser
Steven N. Teplitz

AMERICA ONLINE, INC.
1101 Connecticut Avenue, N.W.
Suite 400
Washington, D.C. 20036
(202) 533-7878

October 29, 1998

TABLE OF CONTENTS

Page

EXECUTIVE SUMMARY

The application now before the Commission proposes to combine the largest U.S. long-distance carrier with the nation's leading provider of high-speed data connections into the home. Chairman Kennard pronounced this combination "eminently thinkable"—"*[i]f* AT&T and TCI make a strong commitment to bring residential customers more choice in local telephone *and high speed Internet access services.*" [Emphasis added.] The proposed combination promises competition in local telephony services, and thus holds great potential for the American consumer. AOL participates in this proceeding to urge that the promise of this proposed merger be extended to high-speed Internet access services as well. AT&T has announced to the Commission publicly that pursuing an "open broadband strategy" is the "right thing to do." AOL agrees—and urges the FCC to transform that promise into a real commitment.

The concept of "open broadband"—which the parties themselves define as a "level playing field, in terms of access, to that broadband [set of network facilities]"—is crucial to the speedy availability of high-speed Internet services and, therefore, key to the ultimate benefits that American consumers can derive from video-enabled Internet services. Openness and competition have fueled the Internet's dynamic growth in the narrowband environment, which has led to a wealth of benefits to consumers and the U.S. economy. High-speed Internet access services can add to those benefits if deployed in a manner that fosters the consumer choice to which Internet users have become accustomed. But these benefits will not be fully or quickly realized if the providers of the underlying last-mile broadband transport services confine their availability to one choice—their own affiliated Internet service provider.

Notwithstanding their professed commitment to "open broadband", the merger participants have made plain that broadband consumers will "have to go through us" to get the Internet service provider of their choice. Through a web of joint ownership and exclusive supply arrangements, TCI has already positioned its affiliated company to be the exclusive high-speed Internet service provider for consumers constituting more than 50% of all cable subscribers nationwide — a total of 57 million homes and growing. AT&T's acquisition of TCI will only strengthen the merged entity's incentive and ability to pursue this strategy.

Moreover, the parties' announced "through us" plans for the provision of high-speed data transport service also would forestall full and effective loop-to-loop facilities-based competition between cable and telephone operators and, in turn, delay and make more costly the roll-out of broadband technology.

The history of cable regulation demonstrates, furthermore, that failure to act now will likely require policymakers to pursue broader, more detailed intervention in the future in an effort to undo the more entrenched interests that will develop in the coming years. Given the potential for this merger to delay the development of video-enabled Internet services, it should be clear that the question for policymakers is not *whether*, but *when*, they will find themselves compelled to address the cable gatekeeper role in order to promote high-speed data transport services for Internet connections. Action now to lay out a pro-competitive foundation for video-enabled Internet services should ultimately require far less government intervention or oversight in the future.

The model for such early, targeted safeguarding can be drawn directly from the existing cable regulatory framework. Open access requirements have served as a cornerstone

of communications policy wherever cable operators have sought to threaten competition and consumer choice by favoring their affiliated operations. Application of an open access obligation to AT&T/TCI's cable broadband data transport capabilities would be a logical outgrowth of these policies and offers the least intrusive means to target the potentially harmful effects of this merger on the nascent broadband marketplace. Such a condition would offer a measure of openness while both preserving AT&T/TCI's strong economic incentive to deploy broadband technologies and respecting the technical requirements of cable operators. Where a merger presents potential anticompetitive effects which may not be explicitly addressed by existing Commission's rules, the Commission has found it particularly appropriate to apply prophylactic safeguards in order to protect the public interest.

The requisite *Bell Atlantic/NYNEX* competitive analysis of the impact of this merger on the last-mile high-speed data transport input market confirms the need for conditioned approval of this transfer. Indeed, the applicants fail to address the adverse public interest effects that their merger will have on competition in the broadband data transport input market in the roll-out of broadband Internet access offerings.

Policymakers have consistently recognized that the openness of the infrastructure on which the Internet nests is integral to the competitiveness and innovation that drives its extraordinary success. For that reason, the openness of "last mile" infrastructures is a matter of concern as broadband infrastructures are deployed. As the Commission pronounced recently in its *MCI-WorldCom Order*:

> We seek not to regulate the Internet, but rather to ensure that Internet services which rely on telecommunications transmission capacity, remain competitive, accessible, and devoid of entry barriers.

This transaction creates the need, presents the opportunity, and evokes the urgency for policymakers to take action to ensure consumer choice and competition in high-speed Internet access services.

FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In The Matter Of	)	
	)	
Joint Applications of	)	
AT&T Corporation and	)	
Tele-Communications, Inc. for	)	CS Docket No. 98-178
Transfer of Control to AT&T	)	
of Licenses and Authorizations	)	
Held by TCI and Its Affiliates or	)	
Subsidiaries	)	

To: The Commission

COMMENTS OF AMERICA ONLINE, INC.

America Online, Inc ("AOL"), pursuant to Section 1.51(c) of the Commission's Rules, hereby submits these comments in response to the agency's Public Notice concerning the above-referenced joint applications filed by AT&T Corporation ("AT&T") and Tele-Communications, Inc. ("TCI").[1] This merger promises to promote competition and consumer choice in local telephony services and thus holds great potential for the American consumer. AOL participates in this proceeding to urge that the proposed merger's promise of competition and consumer choice be extended to high-speed Internet access services as well.

---

[1] FCC Public Notice, *AT&T Corporation and Tele-Communications, Inc. Seek FCC Consent for a Proposed Transfer of Control*, CS Docket No. 98-178, DA 98-1969 (rel. Sept. 29, 1998). *See Applications of Tele-Communications, Inc., Transferor, and AT&T Corp., Transferee,* CS Docket No. 98-178 (filed Sept. 14, 1998). A description of the transaction was filed as an appendix to the applications and is referenced hereinafter as "Description of Transaction."

AT&T has announced to the Commission publicly that pursuing an "open broadband strategy" is the "right thing to do."[2] AOL agrees—and urges the FCC to transform that promise into a real commitment. The Commission should take early, effective steps to safeguard consumer choice and competition in Internet services and to promote the development of full and effective facilities-based competition in the "last-mile" broadband data transport services.[3]

The combination of AT&T and TCI will enhance the ability of the merged entity to pursue its announced intention to use its video monopoly to favor its affiliated company for video-enabled Internet services. This model, if allowed after the proposed merger, will require consumers to purchase two Internet services in order to receive the one they want. This, the Commission—acting in the interest of consumer choice and competition—should not permit.

The Commission must ensure that this transaction does not allow the merged entity to become a gatekeeper between consumers and the Internet. Accordingly, for the reasons set

---

[2] *Telecom Mergers: En Banc Hearing on Telecom Mergers To Discuss Recent Consolidation Activities in the Telecommunications Industry, Focusing on Three of the Proposed Mergers Before the Federal Communications Commission* (October 22, 1998) ("Unofficial Hearing Transcript"). Because the FCC's official copy vendor could not supply the official transcript in time for this filing, a transcript was prepared from a videotape of the hearing.

[3] For the purposes of this submission, the term "Internet services" may include the following elements: (1) "high-speed (or broadband) data transport," for which the last-mile loops to homes, businesses, or institutions are provided by cable systems or local exchange carriers; and (2) "Internet access services," which encompass both the actual connection to the Internet using those data transcripts facilities and a host of content-rich offerings, including e-mail, chat rooms, interactive games, news reports, etc.

forth in detail below, FCC approval of the proposed merger should include an open access condition on the provision of last-mile broadband cable data transport services.

I. AT&T/TCI'S PROMISE OF CONSUMER CHOICE AND COMPETITION SHOULD EXTEND TO LAST-MILE BROADBAND TRANSPORT FOR INTERNET ACCESS

AT&T's acquisition of TCI has been heralded as providing AT&T with its long sought inroad into the local exchange market. Equally important is the merger's potential to affect significantly the provision of "last-mile" broadband data transport for advanced Internet services.[4]

In the Commission's recent *en banc* hearing concerning the proposed merger, AT&T promised that the merged entity would

> further an open broadband strategy. That would be our business philosophy and our business strategy, and it's really predicated on two things. First, it's the right thing to do. Second, it's in our self-interest. If you can't count on one, you should surely be able to count on the second. Content is essential to make money in networks. The only way to make money in networks is to have the highest degree of utilization. It's a very capital intensive, high fixed-cost business, and to invite as much content over that broadband set of network facilities is absolutely, Mr. Chairman, what we want to do. And when I expressed "open broadband," let me be more specific, if I may. *By "open*

---

[4] In their Description of the Transaction, AT&T/TCI appear to broadly define all Internet access providers—and even Internet backbone providers such as UUNET—as Internet service providers ("ISPs"). The FCC distinguishes between ISPs, online service providers ("OSPs"), and Internet backbone providers ("IBPs"). ISPs "generally offer consumers and business purely access to the Internet, including at least an IP connection to an Internet host/router." Barbara Esbin, *Cable Over Broadband: Defining the Future in Terms of the Past,* OPP Working Paper Series No. 30 at 18 (August 1998). OSPs "combine content origination, computer database services, and proprietary interfaces with IP access ... to the Internet." *Id.* at 17. IBPs "route traffic between Internet access providers [*i.e.,* ISPs and OSPs] and interconnect with other" IBPs. *Id.* at 19 (internal citations omitted). AOL here uses the term "ISP" to refer to both ISPs and OSPs (such as @Home) but retains the term "IBP."

broadband," I would mean a level playing field, in terms of access, to that broadband.[5]

The concept of "open broadband"—which the parties themselves define as a "level playing field, in terms of access, to that broadband" data transport facility—is crucial to the future of the Internet and, therefore, key to the ultimate benefits that American consumers can derive from advanced Internet services. If the existing providers of last-mile telephone facilities and cable facilities both offer data transport services in a competitive marketplace, ISPs and others could choose between them based on their relative price, performance, and features. In such a marketplace, ISPs and consumers using the Internet generally could bring about the facilities-based competition between two infrastructures that was contemplated by the authors of the Telecommunications Act of 1996 ("1996 Act").[6]

Full and effective facilities-based loop-to-loop competition in the broadband context would free ISPs and the public they serve from their current exclusive reliance on voice-oriented telephone company facilities and stimulate the development of data-friendly networks. This competition will, in turn, drive down prices and increase the affordability and widespread availability of Internet access to the benefit of all consumers. In short, true loop-to-loop competition would go far toward fulfilling U.S. policy goals "to ensure that online service providers can reach end-users on reasonable and nondiscriminatory terms and conditions."[7]

---

5 Unofficial Hearing Transcript (emphasis added).

6 1996 Act, Pub. L. No. 104-104, 110 Stat. 56.

7 The White House, *A Framework for Global Electronic Commerce*, July 1, 1997, at 11 (emphasis added) ("Global Electronic Commerce").

But the parties to the proposed merger are playing a word game with the Commission. They say they are committed to open broadband, but they insist that the consumer must go "through" their service to get to the Internet service of the consumer's choice. The Commission should enforce the merger partners' commitment to open broadband by requiring that last-mile facilities be used to promote competition and choice for consumers of both voice telephony *and* Internet services.

Openness and competition have fueled the Internet's dynamic growth in the narrowband world and have delivered a wealth of benefits to consumers and the U.S. economy. Today, thousands of companies offer residential subscribers Internet access and content services over open access "last-mile" narrowband switched public telephone network facilities. As a result, consumers choose from multiple providers offering a variety of price and feature options including content, style, connection quality, organization, and navigation. In this open entry environment, companies have been forced to innovate, and the public has reaped the benefits. Choices run the gamut from comprehensive end-to-end services offering connection, content, and "community" (such as e-mail and chat) to those that offer a "no frills" package for a reduced price.

As this range of offerings appeals to every segment of the population interested in interactive services, consumer demand for such services has grown dramatically. Along the way, the Internet has changed the way Americans communicate, learn, work, socialize, and entertain themselves. It also has reshaped the U.S. economy by fueling consumption for end-user equipment, by creating jobs, and by enhancing the productivity and efficiency of the

American workforce. The Department of Commerce recently predicted that Internet-related technology and services will "drive economic growth for many years to come."[8]

High-speed Internet access services can add to those benefits if deployed in a manner that fosters the consumer choice to which Internet users have become accustomed. The "always-on" nature of broadband facilities, combined with their increased capability to carry large amounts of voice, data, and video, promises to increase dramatically the appeal of the Internet for consumers at home and at work. Schools, libraries, and hospitals will be able to take advantage of new Internet multimedia capabilities to provide distance learning, remote research, and telemedicine to the communities they serve. But these benefits will not be fully or quickly realized if the providers of the underlying last-mile broadband transport services confine their availability to one choice—their own affiliated ISP.

As the dominant provider of video services, the cable company owners of these essential broadband transport facilities have no incentive to see the growth of a truly video-enabled Internet service. There is little wonder that the traditional hostile cable attitude toward competition is threatened by the openness and competition of the Internet.

When the proposed merger was announced, Chairman Kennard characterized the combination as "eminently thinkable" if "AT&T and TCI make a strong commitment to bring residential customers more choice in local telephone *and high speed Internet access services.*"[9] This transaction does indeed present the FCC with a critical opportunity to preserve the

---

[8] Department of Commerce, *Emerging Digital Economy* at 2 (1998) ("Emerging Digital Economy").

[9] FCC News Release, *Statement from FCC Chairman William E. Kennard on AT&T and TCI Proposed Merger* (rel. June 24, 1998) (emphasis added).

essential engine of the Internet marketplace—open gatekeeper-free access to "last-mile" facilities—at a crucial point in the emergence of video-enabled Internet service.

This is not a call for government intervention or regulation of the Internet. Federal law and sound public policy would be inconsistent with any such move.[10] Rather, these comments direct the Commission's attention solely to last-mile facilities—the local bottlenecks through which Internet services are delivered to the home—where the two parties to this application have openly committed to creating an electronic gatekeeper. This commitment is an open challenge to this nation's long-sought goal of a two-wire world. Targeted FCC action at this early juncture is thus essential to achievement of two critical goals: first, assuring consumers the range of choices they have come to expect from the Internet; and second, creating the facilities-based competition in local voice, video, and data sought under the 1996 Act.

Accordingly, the Commission should condition approval of the AT&T/TCI merger on a minimal open access safeguard that will promote consumer choice and Internet service competition in the broadband marketplace. The policy underpinning such a condition is firmly rooted in existing cable regulation, and it would not seek to invoke common carrier requirements nor impose significant technical or financial burdens on affected operators.

The FCC has asserted the power under Section 310(d) to set appropriate remedial conditions—especially prophylactic safeguards—when a proposed merger raises serious competitive issues.[11] This transaction creates the need, presents the opportunity, and invokes

---

[10] *See* 47 U.S.C. § 230(a)(4) ("The Internet and other interactive computer services have flourished, to the benefit of all Americans with a minimum of government regulation").

[11] For details, *see infra* Section IV.

the urgency for policymakers to move now to ensure that the emergence of video-enabled Internet service is accompanied by the openness that has spurred the Internet's remarkable evolution to date.

II. ABSENT AN APPROPRIATE CONDITION, THIS MERGER WOULD UNDERMINE CONSUMER CHOICE AND COMPETITION IN LAST-MILE BROADBAND TRANSPORT FOR INTERNET ACCESS

The application now before the Commission proposes to combine the largest U.S. long-distance carrier and its Internet backbone facilities with the nation's most powerful provider of cable connections into the home. The assets that these companies bring to the transaction are formidable.[12] TCI is "one of the largest providers of cable television service in the United States" delivering video products to at least 20.2 million customers, with broadband infrastructure passing a minimum of 34.1 million homes throughout the United States.[13] TCI combines its local video market power with its ownership and control of @Home, a leading provider of broadband consumer Internet services over the cable television infrastructure.

---

[12] AT&T provides long distance communications services, local telephone and wireless services, Internet access service, and provides backbone facilities. *See* Description of Transaction at 2, 34; AT&T Corp., 1997 Annual Report, AT&T Strategy Overview (1997) www.att.com/ar-1997/overview.html. AT&T's Internet backbone network encompasses network nodes in eleven major U.S. cities. As reported by *AT&T's Managed Internet Service Network Map* www.att.com/worldnet./wmis/misb.html. The company describes itself elsewhere as one of few Internet backbone providers with a nationwide system. *See AT&T IP Backbone Whitepaper: Giving Business the Edge* (October 1997) www.att.com/worldnet/wmis/ipwpaper.html.

[13] Description of the Transaction at 6-7. TCI explains that these numbers include the customers and homes of its affiliates. *Id.* at 6 n.11.

TCI operates @Home as a consortium with 18 of the nation's largest MSOs.[14] Through the consortium, the participants have agreed to offer @Home as the only cable-based Internet service option to a potential 58.5 million homes—50% of the households in the United States and Canada so far.[15] The @Home operating agreement prevents its other MSO owners and affiliates from dealing with unaffiliated ISPs directly; instead, all MSOs have agreed that negotiations for access to the last-mile facilities must go through TCI-controlled @Home itself.[16]

AT&T publicly claims that the merger is "about consumer choice for new service alternatives" and has said it "will offer services a la carte as well as in packages."[17] Eight days ago, AT&T proclaimed to the Commission that the proposed merger is "just what Congress wanted to see happen when it passed the Telecom Act back in '96."[18] This might be

---

[14] Reply comments of @Home Corporation, CC Docket No. 98446 at 2n.2 (filed Oct. 9, 1998) (@Home Reply Comments"). Seven of the @Home partners are among the nation's 10 largest MSOs—representing approximately 80% of the national cable market. *See* @Home Oct. 13 News Release; *Annual Assessment of the Status of Competition in Markets for the Delivery of Video Programming,* CS Docket No. 97-141, FCC 97-423, Table E-3 (rel. Jan. 13, 1998) (*"Cable Competition Report"*).

[15] At Home Corporation, Securities and Exchange Commission Form 424B4 at 2 (filed Aug. 13, 1998) www.sec.gov/archives/edgar/data/1020620/0001012870-98-002107.txt ("@Home SEC Form 424B4"); Forrester Research Inc., *Broadband Hits Home* at 2 (Aug. 1998) ("Forrester Report") (predicting 80% market share for cable in upgraded broadband transport).

[16] For further details, *see infra* Section V.

[17] *See generally Convergence and Consolidation in the Entertainment and Information Industries: Hearing Before the Antitrust, Business Rights, and Competition Subcommittee of the Senate Judiciary Committee*, 105th Cong. 114 (July 7, 1998) (Testimony of C. Michael Armstrong, Chairman and CEO, AT&T Corp.); Unofficial Hearing Transcript.

[18] Unofficial Hearing Transcript.

true with respect to voice telephony. As applied to Internet service, notwithstanding their proffered commitment to open broadband, they have made it clear that they intend to embrace a very different model.

TCI's chairman has described this transaction as the first step toward the vision of a national electronic gateway to the Internet in which both consumers and ISPs would "*have to go through us.*"[19] In other words, he envisions a merged entity "though" which consumers would have to pass in order to get any other Internet service—and "through" which all ISPs will have to pass to get access to their customers. The press account noted that while

> [g]oing 'through us' has been cable's game,... the Internet and satellites have diminished its gatekeeping powers. Now Malone foresees a *new gatekeeper role*, with the whole cable industry aligning with AT&T to form a single giant network.... @Home and [Road Runner] are poised to become *the electronic gateway to the Internet*.[20]

Of course, current legal developments make clear the magnitude of competition concerns raised by having to "go through" one entity to reach the Internet.[21]

The CEO of @Home echoed these sentiments, asserting that "[w]e have access to the home. If [another ISP] wants to get there with broadband, *they will have to work through*

---

[19] Ken Auletta, *How the AT&T Deal Will Help John Malone Get Into Your House*, The New Yorker, July 13, 1998, at 25 (emphasis added) (attached as Appendix D).

[20] *Id.*

[21] *See U.S. v. Microsoft*, No. 1:98CV01232 (D.D.C. 1998).

us."[22] He characterized the notion that another ISP could reach potential broadband customers directly with one word: "ridiculous."[23]

AT&T has made equally plain its intent to embrace, expedite, and enlarge upon this model for broadband Internet access. Testifying before the Senate, AT&T's Chairman acknowledged that a consumer would be required (1) pay to subscribe to @Home for the bundled last-mile transport and ISP service, (2) pay again for the consumer's desired ISP, and (3) have to subscribe to go through @Home to reach the desired ISP's site.[24]

More recently, during the Commission's *en banc* hearing on the proposed merger, AT&T and TCI did not clearly answer questions regarding this "pay for two to get one" issue—even in response to pointed inquiry. When Chairman Kennard asked "how competitors who want access to your networks will get access," AT&T's Chairman responded generally that it had business incentives to make available "open broadband."[25] TCI's President added that the parties have "a passionate commitment" to the "concept of complete neutrality."[26]

---

22 Saul Hansell, *The Battle For Internet Supremacy is Shifting to the Companies That Sell the Connections to Users*, N.Y. Times, June 29, 1998, at D4 (emphasis added).

23 *Id.*

24 *See AT&T's Armstrong Pledges Access to Cable Systems*, Communications Daily, July 8, 1998 (When asked by Sen. Leahy (D-VT) whether AT&T would offer TCI's pipeline to ISPs other than those owned by cable, Armstrong replied that customers of ISPs 'can subscribe and get there' over cable.... *He said if here were an AOL customer, he would subscribe to TCI's @Home Cable Internet service, or other [cable] service, to reach AOL.*") (emphasis added). *See also* Forrester Report at 7 ("A provider like Cox@Home" will require subscribers to "accept a hard-wired start page.").

25 Unofficial Hearing Transcript.

26 *Id.*

But, as the answers to follow-up questions indicated, this "complete" neutrality apparently does not extend to potential providers of competitive Internet video programming other than their affiliated Internet service, @Home.[27]

> The following exchange is revealing for what is *not* said:
>
> Commissioner Ness: Just to clarify, Mr. Hindery, does this mean, for example, that a TCI subscriber, TCI/AT&T subscriber, who chooses to have modem service, dial-up modem service, would not have to pay for @Home if it wished to have access to a different ISP? Or, would it still have to pay for, effectively, two Internet service providers if it chose a different ISP?
>
> Mr. Hindery: Commissioner, there is a distinction between Internet service providers and online service providers, as you know.
>
> Commissioner Ness: Correct.
>
> Mr. Hindery: Every customer in my service area has four choices today to access the Internet. They can do it in a dial-up telephone modem based environment; they can do it through DSL, which the gentleman on my left can talk to more capably than I; they can do it in a wireless setting; or they can do it on the broadband network of the cable operator. That's the world that's out there. Four ways into the Internet....[28] What I have adopted, as I said, is a

---

[27] The Chairman raised the issue of a "very interesting video streaming technology" and questioned TCI about @Home contractual provisions that prohibit a participating cable operator from passing through more than 10 minutes of such Internet delivered video programming. *Id. See also* At Home Corporation, Securities and Exchange Commission Form 10-Q at 21 (filed Jul. 28, 1998) www.sec.gov/archives/edgar/data/1020620/0000929624-98-001291.txt ("@Home Form 10-Q") (noting that @Home's Master Distribution Agreement provides that cable partners have "the right to block access to certain content, including streaming video segments of more than ten minutes in duration, and the [c]ompany is obligated to use its reasonable best efforts to block such access"). TCI's President identified this provision as a "restriction which we imposed on @Home so that we were the determiner of how stream video worked in our world.... *The limitation ... is one that I imposed on @Home so that I determined my future in the area of streaming video.*" Unofficial Hearing Transcript (emphasis added).

[28] *Id.* TCI did not discuss whether these potential rivals would be able to provide substitutable high-speed data transport services now, or any time in the near future. The facts demonstrate serious doubts as to whether these potential alternatives can function as effective substitutes in many areas within the relevant time frame. *See infra* Section V; *see generally*

(Continued...)

strategy of complete neutrality vis-a-vis both the online service providers and the portals and aggregators. And to give you an example, a TCI/AT&T customer *who is an @Home subscriber*, having chosen my form of access to the Internet as opposed to the other three alternatives, can go to an online service provider *through my screens* where I have designed everything that they can, in a sense—a phrase we use called "double-click"—they can go straight through the OSP provider world to the portal and aggregator world without any interference through my system. So the customer has made a choice as to how he or she would like to access the Internet. If that choice is my delivery mechanism, then I have gone a further step, which is the one I described of complete neutrality into the Internet vis-a-vis the OSPs and the portal aggregator community.

Commissioner Ness: So bottom line: If one wanted to have a different online service provider one would not have to pay twice effectively for the same service, is that correct?

Mr. Hindery: That's correct. Let me give you a specific example. One of the dominant OSPs, Commissioner, has a program called "Bring Your Own Access"—it's called "BYOA." $9.95 you bring your provider, whoever he or she might be and for $9.95 you then get the services of that OSP. I have specifically confirmed our willingness to support, embrace that program. So very specifically to your question, there is no interference. My BYOA opportunity is exactly similar to that of any other ISP in the country with no limitation.[29]

(...Continued)
Declaration Regarding market Definition of Professor Jerry A. Hausman, MacDonald Professor of Economics, Massachusetts Institute of Technology (MIT) (attached as Appendix A) ("Hausman Market Definition Declaration").

[29] Unofficial Hearing Transcript. The fact that AOL enables customers who "bring their own access" to avoid paying twice for such access is in no way responsive to Commissioner Ness's query as to why AT&T/TCI would still require such customers to pay for the ISP elements of @Home's bundled offering to reach the ISP service they desire. As described by @Home's CEO:

> @Home serves not only as a high speed pipe, but a value-added Internet experience. It's an Internet Service provider, and a content-rich online service. It's e-mail, multiplayer games, IP telephony, enhanced TV and more.

Tom Jermoluk, *@Home Network Chairman and CEO Tom Jermoluk's Remarks to the National Press Club* (June 9, 1998) http://www.athome.net/corp/.news/tj_press_speech.html ("*Jermoluk Press Club Speech*"). It follows that even AOL's offering of a reduced

(Continued...)

These responses demonstrate that AT&T and TCI have, once again, embraced the cable bottleneck model for providing last-mile high-speed data transport services—even though that history has repeatedly been marred by lengthy legal battles seeking to solve that "cable problem." The facts now before the Commission reveal that these announced plans for the provision of high-speed data transport service, as articulated and jointly advanced by the parties to this transaction, would certainly diminish consumer choice and forestall full and effective loop-to-loop facilities-based competition between cable and telephone service operators. An open network policy, on the other hand, would fulfill national policy goals and lead to increased competition, improved telecommunications infrastructures, more customer choice, lower prices, and new and better services.[30]

A. AT&T/TCI's Gatekeeper Ambition Seeks To Deny The Public The Full Benefits Of Upgraded Internet Access Services Over Last-Mile Broadband Data Transport Facilities

TCI has substantial power over last-mile broadband data transport service input for the Internet marketplace.[31] It is TCI's control over this essential input that has both motivated and enabled it to discriminate against independent providers of video-enabled Internet service and in favor of its own affiliated companies. As explained above, this will ultimately hurt

---

(...Continued)
subscription rate for its "Bring Your Own Access" plan for consumers who have already obtained simple Internet access would not spare @Home subscribers from having to pay for two "value-added" Internet services to get to the one source of online content they want.

[30] *See* Global Electronic Commerce at 12

[31] Section V, *infra*, analyzes this power under the Commission's *Bell Atlantic/NYNEX* rubric. *See generally* Hausman Market Definition Declaration.

consumers by depriving them of the benefits of choice among competing services and of true competition between the providers of last-mile broadband facilities: increased affordability and more widespread availability of Internet services, which would ultimately lead to new and innovative products and services.

1. By Positioning Itself As A Gatekeeper Between Consumers And The Internet, AT&T/TCI Seeks To Deprive Users Of Effective Choices Among Service Providers

As noted in the preceding section, AT&T/TCI's desire to become a gatekeeper over last-mile provision of high-speed transport will prevent the emergence of robust competition in video-enabled Internet services. Certainly, AT&T/TCI's incentives to maintain exclusive control over this input also will increase accordingly.[32]

Inevitably, absent an open access condition, consumers will be harmed by this merger.[33] In order to receive access to advanced Internet services, consumers will be forced to continue to pay for @Home's complete, self-described "value-added" online service—including its last-mile transport functionality, access to the Internet, and content—just to be

---

[32] *See supra* note 29 and accompanying text (reviewing responses to Chairman Kennard's question about @Home restrictions on video streaming).

[33] Section V, *infra*, discusses the vertical integration issues raised by the proposed merger. "In evaluating mergers that result in increased vertical integration, ... [the Commission] must examine whether the merger will increase the ability or incentives of the merged firm to affect competition adversely in any downstream end-user market." Teleport Communications Group Inc., Transferor, and AT&T Corp., Transferee for Consent to Transfer Control of Corporations Holding Point to Point Microwave Licenses and Authorizations to Provide International Facilities-Based and Resold Communications Service, CC Docket No. 98-24, ¶ 42 (rel. Jul. 23, 1998), (citing *BT/MCI*, 12 FCC Rcd at 15410, ¶ 155) ("*AT&T/Teleport & Order*").

able to obtain the Internet service of their choice.[34] As the dominant provider of video services and broadband data transport to many homes, AT&T/TCI will be able to charge supra-competitive prices for its video or broadband services. Moreover, in the limited markets where AT&T/TCI face facilities-based competition, the merged entity will be able to price discriminate by charging prices at or below marginal cost to harm its competitors, while still being able to recoup lost profits in other services or markets where it faces no competition.

2. By Denying Reasonable Access To Other Internet Service Providers, AT&T/TCI Will Deny The Public The Benefits of Competition In Last-Mile Facilities To The Home

The development of full loop-to-loop competition will likewise be stunted by TCI's unwillingness to offer the local cable loop to non-affiliated ISPs. By excluding non-affiliated ISPs from the merged entity's local loop, AT&T/TCI would eliminate any opportunity for these service providers to choose between last-mile telephone facilities and cable facilities based on relative price, performance, and features offered by each. Consumers, in turn, will not enjoy the same range of end-user Internet options—in terms of price, availability, and innovation—that facilities-based competition would bring.[35] Such competition is not only a fundamental objective of the 1996 Act but will facilitate the development and ultimate deregulation of local networks.

---

[34] "The Internet is only useful to people if they are able to access it, and the value of the Internet is, to an increasing extent, dependent on the level of bandwidth available to end users." Kevin Werbach, *Digital Tornado: The Internet and Telecommunications Policy*, OPP Working Paper Series No. 29, at 73 (March 1997) ("*Digital Tornado*").

[35] If the existing provider of both last-mile telephone facilities and last-mile video facilities offered data transport services, ISPs and others could then choose between these two last-mile loops.

More broadly, growth and development of the Internet itself could be stifled. Existing vigorous competition in Internet services has enabled many U.S. consumers to experience and explore the Internet.[36] Americans have realized significant benefits from the Internet largely because the underlying narrowband transport facilities now used to access it are deployed in an open manner that spurs rival ISPs to create innovative offerings and applications that maximize the potential capabilities of the Internet. Consumer demand for advanced Internet services would surely flourish in a similarly open broadband environment that allows a choice of high-speed transport options to access the ISP and content services they favor.

B. The Administration, Congress, And The Commission Have All Championed An Open, Competitive Internet As Fundamental To National Policy

The executive and legislative branches, as well as the FCC, have identified the critical link between a competitive Internet marketplace and the delivery of extensive benefits to communications, education, and the national economy. These policymakers have recognized the open, competitive infrastructure of the Internet as integral to its extraordinary success and, thus, a matter of vital concern as broadband infrastructures are deployed.[37] As the Commission pronounced recently in its *MCI-WorldCom Order*:

---

[36] *Digital Tornado* at 82-83.

[37] For example, ensuring that consumers could choose among competing information services was a primary motivation behind the establishment of structural safeguards in its *Computer II* decision and non-structural safeguards in its *Computer III* order. The FCC currently is addressing this issue again, "seek[ing] to ensure the continued competitiveness of the already robust information services market." *Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services*, 13 F.C.C. Rcd. 6040, 6042 ¶ 1 ("Computer III Further Notice").

> *"We seek not to regulate the Internet, but rather to ensure that Internet services which rely on telecommunications transmission capacity, remain competitive, accessible, and devoid of entry barriers."*[38]

Policymakers at all levels of government agree that "[c]ompetition in the Internet industry ... has led to the rapid expansion of the Internet beyond anything that could have been foreseen."[39] Congress declared in the 1996 Act that "the policy of the United States" is "to preserve the vibrant and competitive free market that presently exists for the Internet...."[40] Recognizing that a competitive Internet would be a particularly important tool in the education and health fields, lawmakers instructed the Commission to "establish competitively neutral rules" to promote Internet access for all "classrooms, health care providers, and libraries."[41] The FCC subsequently concluded that these entities would be best served by a market in which multiple types of information service providers could compete based on the quality, design, and price of their products.[42] The agency recently expanded its inquiry into this issue in requesting "comment on how the Commission can ensure that customers are free to choose

---

38 *Application of WorldCom, Inc. and MCI Communications Corporation for Transfer of Control of MCI Communications corporation to WorldCom, Inc., CC Docket No. 97-211*, FCC 98-225 ¶ 142 (rel. Sept. 14, 1998) (emphasis added) *("WorldCom/MCI Order")*.

39 *Digital Tornado* at 83.

40 47 U.S.C. § 230(b)(2).

41 47 U.S.C. § 254(h)(2)(A).

42 *See* Federal-State Joint Board on Universal Service, *Report to Congress*, 13 FCC Rcd 11501, 11584-85 (1998) (*"Report to Congress"*) (concluding that many entities should be eligible to provide Internet service to schools and libraries because of the consumer benefits from "competitive pressures").

their own ISPs" and the need to "require this service to be provided to independent ISPs ... only on equal terms and conditions."[43]

This fundamental focus on assuring a consumer- and competition-friendly Internet, free of gatekeepers or entry barriers, has been a consistent theme of the Administration. The White House has declared that

> [t]he goal of the United States will be to ensure that online service providers can reach end-users on reasonable and nondiscriminatory terms and conditions. *Genuine market opening will lead to increased competition, improved telecommunications infrastructures, more customer choice, lower prices, and increased and improved services*.[44]

Similarly, one of four principles Vice President Gore has identified as the "foundation of government policy" is "guaranteeing open access to networks on a non-discriminatory basis, so that [global information infrastructure] users have access to the broadest range of information and services" throughout the nation and around the world.[45] The Department of Commerce has accordingly called for creating "optimal conditions for the new digital economy to flourish ... so that the new converged markets of broadcast, telephony, and the Internet operate based on laws of *competition and consumer choice*.[46]

---

[43] Section 706 NOI at ¶ 38. The Commission's policies have fostered "the level of competition, innovation, investment, and growth in the enhanced services industry." *Report to Congress* at 11546.

[44] Global Electronic Commerce at 12 (emphasis added).

[45] *Id.*

[46] The Emerging Digital Economy at 50-1 (emphasis added). The FCC has similarly explained that the Internet's success would be hindered by "[m]oving toward proprietary standards or closed networks" and that an "absence of competition in the Internet service provider market, or the telecommunications infrastructure market, could reduce incentives for innovation." *Digital Tornado* at 7.

Policymakers have thus made clear that a thriving Internet depends upon such competition and choice, which in turn depends upon reasonable access to the infrastructure underlying the Internet. AT&T/TCI's control over available high-speed Internet access facilities and their intended practice of forcing subscribers to use the MSO-affiliated ISP directly subverts these pro-competitive and pro-consumer policies. Moreover, as the following section explains, policymakers have learned how difficult it can be to "unwind" a cable marketplace that has evolved without open access principles.

C. The History Of Policymaker's Attempts To Deal With Cable's Gatekeeper Role Proves The Old Adage, "An Ounce Of Prevention Is Worth A Pound Of Cure"

As the Commission well knows, the development of the cable industry has been accompanied by lengthy legal battles over significant public interest concerns. Over the years, debate among policymakers escalated and came to embrace a growing list of issues and concerns about cable conduct. Ultimately, as the then-chairman (and now ranking member) of the House Telecommunications Subcommittee viewed it, "things got so bad that in 1992 Congress had to act."[47] Lawmakers responded with the sweeping provisions of the Cable Television Consumer Protection and Competition Act of 1992 (the "1992 Cable Act").[48] Four years later, additional provisions intended to eliminate cable bottlenecks and make the multichannel video marketplace more competitive were included in the 1996 Act. Even with all these

---

[47] 141 Cong. Rec. E1571 (daily ed. Aug. 1, 1995) (Statement of Rep. Ed Markey (D-MA)).

[48] *Cable Television Consumer Protection and Competition Act of 1992,* P.L. No. 102-385, 106 Stat. 1460 (1992) ("1992 Cable Act").

initiatives, however, policymakers today continue to wrestle with solving what they view as an ongoing "cable problem."

Set forth below is a review of the lengths to which regulators eventually have been forced to go to remedy concerns about "the cable bottleneck." This analysis of policymakers' actions reveals that two particular aspects of those concerns: consumer choice and access for independent, non-affiliated content providers. Because these issues have surfaced once again with respect to the emerging cable Internet marketplace, this history is instructive as to the policy that the Commission should pursue—specifically, assuring preservation of an open Internet now, lest later steps prove to be "too little, too late."

1. The History Of Cable Regulation Is Marked By Tumultuous Post Hoc Efforts To Reverse Industry Structures And Practices Long-Challenged By Consumers And Competitors

Shortly after the Cable Communications Act of 1984 widely deregulated rates, policymakers began citing an "obvious and consistent cry from subscribers" about escalating rates charged by cable operators seen as unconstrained by either competition or regulation.[49] Policymakers also trained much of their early attention on cable operator treatment of the local TV broadcast stations that competed with cable for viewers.[50]

---

[49] 138 Cong. Rec. E3244 (1992) (Statement of Rep. Gradison). *See also* 142 Cong. Rec. S5692 (daily ed. Feb. 1, 1996) (Statement of Sen. Leahy) ("I do not think you can name a consumer in this country who did not feel that he or she was being gouged"). For instance, the FCC found that TCI constrained competition by refusing to carry channels that would compete with programming in which it held a financial interest. *See Competition, Rate Deregulation and the Commission's Policies Relating to the Provision of Cable Television Service*, 5 FCC Rcd 4962, 5028-29 (1990) (citing anti-competitive provisions TCI imposed against CNBC as a condition of carriage) (*"1990 Cable Competition Report"*).

[50] *See, e.g., The Local Signal Carriage Act of 1985*, S. 1881, 99th Cong., 1st Sess. (1985).

To deal with these and other relatively discrete concerns, lawmakers offered various targeted proposals beginning in the late 1980s. "The point of these bills," said then-Senator Al Gore, "is to give cable consumers and satellite dish owners *modest relief* from skyrocketing rates and the pervasive anticompetitive practices within the cable/programming industry."[51] Not surprisingly, the cable industry fervently opposed these early initiatives and contributed substantially to their defeat.

In 1992, policymakers acted—with far more expansive and burdensome regulation, and resulting business upheaval, than might have been the case in earlier years. Deciding that "consumers need to be protected from being gouged by unscrupulous cable operators," lawmakers ultimately sought to protect consumers from cable "monopoly abuses" of every sort after receiving "many complaints" from constituents and competitors alike.[52] The sweeping regulatory provisions of the 1992 Cable Act covered rates, service, equipment, tiering, bundling, access to carriage, access to programming, content—and beyond.

The 1992 Cable Act proved to be a lengthy and tumultuous policy, political, and legal battle which imposed an enormous burden on the FCC and created tremendous upheaval in the marketplace. The comprehensive regulatory structure established to govern cable rates alone was extraordinarily complex—and took Herculean efforts on the part of the Commission and

---

51 BNA Daily Report for Executives, 11/17/89.

52 138 Cong. Rec. S14247 (1992) (Statement of Sen. Chafee); 138 Cong. Rec. S13544 (1992) (Statement of Sen. Gorton); 138 Cong. Rec. H8685 (1992) (Statement of Rep. Levine); 138 Cong. Rec. S48685 (1992) (Statement of Sen. Metzenbaum) ("We cannot allow price gouging by the cable industry to continue.... We cannot allow monopoly abuses to go unchecked.")

its staff to devise, defend, and apply.[53] Moreover, these new regulations were widely credited with driving many smaller cable operators to sell out, thereby fueling greater consolidation among MSOs, as well as producing unanticipated rate hikes for many consumers. All of this underscores the inevitable shortcomings and unintended consequences of sweeping post hoc regulation.[54]

Less than four years later, Congress sought to open additional points on the cable bottleneck. While the 1996 Act provided for some relaxation of rate regulation and barriers to cable entry into new service arenas, the new law also elaborated upon the earlier efforts to address vertical integration concerns and encourage more direct competition in the multichannel marketplace. Key provisions sought to (1) promote the commercial availability of cable navigational devices, and (2) allow homeowners to purchase the cable wiring inside their residences.

Meanwhile, the Commission continues to "take[ ] a series of steps to minimize and eliminate obstacles to competition" based on its findings that "[l]ocal markets for the delivery of video programming generally remain highly concentrated and continue to be characterized by some barriers to entry and expansion by potential competitors to incumbent cable

---

[53] *See, e.g., Implementation of Sections of the Cable Television Consumer Protection and Competition Act of 1992: Rate Regulation,* 11 FCC Rcd 388 (1995).

[54] All in all, the FCC was required to open more than a dozen different rulemaking proceedings to implement the legislation, issue scores of rulemaking decisions—and hire 200 new staffers to cope with the flood of rate cases. The rulemaking process is still ongoing in 1998, and court challenges remain pending. *See, e.g., Implementation of Section 11(c) of the Cable Television Consumer Protection and Competition Act of 1992: Horizontal Ownership Limits*, MM Docket No. 92-264, FCC 98-138 (rel. June 26, 1998).

systems."[55] As Chairman Kennard recently explained, "Policy makers should no longer have high hopes that a vigorous and widespread competitive environment will magically emerge in the next several months...."[56]

2. Emerging Cable Industry Structure And Practices In Offering Internet Access Raise The Question Of Not Whether, But Merely When, Policymakers Will Have To Act

As to rates, tiering, program services, the set-top box, horizontal concentration, vertical integration, and the cable broadband pipe generally, policymakers have repeatedly been forced to take action against cable industry conduct found to be anticonsumer and anticompetitive. Given AT&T/TCI's commitment to creating a national electronic gatekeeper, it should be clear that the question for policymakers is not whether, but when, they will find themselves compelled to address—yet again—the cable gatekeeper role, this time in the context of providing last-mile high-speed data transport services for Internet connections.

Moreover, the historical development of cable regulation indicates that failure to act now likely will require broader, more detailed intervention in the future to address cables' anticompetitive conduct. But early action to lay out a general pro-competitive foundation for cable provision of last-mile high-speed data transport services would help to maintain the

---

[55] *Annual Assessment of the Status of Competition in Markets for the Delivery of Video Programming*, 13 FCC Rcd 1034, 1038, 1043 (1998) ("*1997 Video Competition Report*").

[56] *Id.* at 1239 (Separate Statement of Chairman Kennard); *see also id.* at 4243 (Statement of Commissioner Ness) (noting that "[m]arket failure may occur when consumers do not have an effective alternative to their cable provider, or it may occur when a bottleneck develops in the programming distribution chain so that viewers are denied access to independent voices that would be heard in a competitive market."); *id.* at 1247 (Separate Statement of Commissioner Tristani) (issuing a "challenge [to] the cable industry to provide consumers with the additional choice they want and deserve").

Internet marketplace's critical open access foundation and (as later discussed in Section V) should ultimately require far less government intervention or oversight. One model for such early, targeted safeguarding can be drawn from the existing cable regulatory.

3. Promoting The Availability Of Choice For Cable Consumers And Reasonable Access For Independent Non-Affiliated Content Providers Are Established Cable Policy Goals

Access safeguards have served as a cornerstone of communications policy wherever cable operators have been found to threaten competition and consumer choice. While operators' provision of cable service is not subject to common carrier regulation, the rules that have emerged form the cable industry's history illustrate the importance of establishing broad principles to support reasonable access at an early stage in the Internet's development—so that bottlenecks between cable consumers and unaffiliated content providers will not become entrenched and, thus, more difficult to unwind later. These same policy goals are now of utmost importance to this proceeding. Rather than await a belated Congressional response, the FCC must ensure that this transaction does not allow the merged entity's provision of last-mile broadband data transport service to be used as the means for becoming a gatekeeper between consumers and the Internet.

a) The Commission has adopted a series of safeguards to promote consumers' choice in the provision of cable offerings

A series of existing safeguards embody a compelling set of principles by which policymakers have sought to constrain the ability of cable operators to impede consumer choice. These include the following:

- ***Commercial Availability of Navigational Devices:*** These recently adopted FCC rules seek to promote "commercial availability" and, thus, consumer choice, in interactive communications equipment used by cable subscribers to access multichannel services—in short, to make this market operate more like the competitive retail market for telecommunications customer premises equipment.[57] Notably, the Commission has signaled its particular concern about the potential for electronic program guides incorporated in set-top boxes to be employed in an anticompetitive fashion. The concern s delineated above with respect to cable provision of last-mile high-speed data transport service in fact present the very same electronic program guide issue in the cable modem context.

- ***Cable Wiring:*** The FCC's rules enhance consumer choice by affording cable subscribers certain rights to connect devices to, and acquire ownership rights in, cable wiring infrastructure located within their residences so that they may use this wiring to reach an alternative provider.[58]

- ***Cable/Consumer Equipment Compatibility:*** These provisions promote consumer choice by generally prohibiting cable customer equipment from disabling the advanced features of customer-owned television receivers, video cassette recorders, and remote control devices.[59]
- ***Tier Buy-Through Restrictions:*** These rules promote consumer choice by barring cable operators from requiring customers to pay for any tier beyond the basic service tier in order to subscribe to programming offered on an a la carte basis.[60]

---

[57] Specific regulations include a new consumer "right to attach" navigation devices to cable systems so long as the equipment does not harm the network or jeopardize system security. In addition, the rules prevent operators from cross-subsidizing charges for a broad class of equipment, and bar cable operators from creating impediments to the interoperability of equipment. *See* 47 U.S.C. § 549; 47 C.F.R. § 76.1200 *et. seq.*

[58] *See Telecommunications Services Inside Wiring and Cable Home Wiring*, 13 FCC Rcd 3659 (1997), *recon. pending*; 47 C.F.R. § 76.806(a). The access rights generally permit consumers to provide and install their own cable wiring within their premises, as well as to connect additional wires (including splitters or other equipment) to that installed and owned by the cable operators. 47 U.S.C. § 624(i); 47 C.F.R. §§ 76.800-806.

[59] 47 C.F.R. § 544(a); 47 C.F.R. § 76.630. *See also Implementation of Section 17 of the Cable Television Consumer Protection and Competition Act of 1992: Compatibility Between Cable Systems and Consumer Electronics Equipment*, 11 FCC Rcd 4121, 4126-27 (1996).

[60] 47 U.S.C. § 543(b)(8); 47 C.F.R. 76.921(a).

- ***Program Access:*** These regulations were intended to foster competition by providing competing satellite carriers nondiscriminatory access to cable-owned program services.[61]

- ***Unbundling Requirements:*** These rules protect consumers by generally preventing an operator from combining the charges for regulated equipment, "basic tier" services, and installation of regulated equipment.[62]

Separately and in conjunction, these rules embody two important principles, consumer choice and competition: (1) consumers should be able to choose among certain component elements of cable operators' offerings on a unbundled basis; (2) consumers should not be unreasonably forced to purchase or subsidize offerings that they do not desire; (3) consumers should be able to use commercially/competitively available third-party products to make full use of a cable operator's services; (4) cable operators should not be allowed to frustrate the availability of competitive offerings; and (5) interoperability is critical to promoting innovation, competition, and consumer welfare.

---

[61] The rules prohibit cable-owned programmers from discriminating against the competitors of cable operators and preclude exclusive program distribution contracts between cable operators and such program services. *See* 47 U.S.C. § 548; 47 C.F.R. § 76.1000 *et. seq.*; *See also, e.g., Implementation of Sections 12 and 19 of the Cable Consumer Protection and Competition Act of 1992: Development of Competition and Diversity in Video Programming*, 8 FCC Rcd 3359 (1993). The 1996 Act extended program access requirements to common carriers that offer programming services by any means directly to subscribers.

[62] The rules also require an operator to disclose these charges separately on bills and bar subsidization across regulated cable service tiers. *See* 47 C.F.R. § 76.923(b); 47 C.F.R. § 76.309(c)(3)(ii)(A); *Implementation of Sections of the Cable Television Consumer Protection and Competition Act of 1992: Rate Regulation*, 8 FCC Rcd 5361, 5734-5795, 5870-5883 (1993); *recons. Implementation of Sections of the Cable Television Consumer Protection and Competition Act of 1992: Rate Regulation*, 9 FCC Rcd 1164, 1182-85 (1993); *Implementation of Sections of the Cable Television Consumer Protection Act of 1996: Aggregation of Equipment Costs by Cable Operators*, 11 FCC Rcd 6778 (1996). *See also* 47 U.S.C. § 543(a)(7).

b) Communications policy provides safeguards to promote independent content providers' access to cable systems

This section highlights the leading policies and provisions that respond to the incentive and ability of cable operators to favor affiliates by requiring that cable (or cable-like) transmission systems make network capacity reasonably available to independent content providers. These include the following:

- ***Leased Access Rules:*** These regulations offer programming providers not carried on a cable system a right to carriage under rates, terms, and conditions that meet the FCC's standard for reasonableness.[63]

- ***Carriage Agreement Rules:*** These regulations are intended to shield independent programmers from unfair discrimination by cable operators in setting terms and conditions for cable carriage.[64]

---

[63] 47 U.S.C. §§ 532(c)(1), (c)(4), 47 C.F.R. § 76.1504. Within this framework, cable operators are required to make available to non-affiliated "persons" a limited amount of "channel capacity" for "commercial use." The provisions did not initially establish a strict nondiscriminatory rate structure for the use of such channels, but they were later amended because "some cable operators have established unreasonable terms, or, in some cases, simply refused to discuss the issue of leased access with potential lessees." House Committee on Energy and Commerce, H.R. Rep. No. 102-628 at 39 (1992) ("1992 House Report").

[64] 47 U.S.C. § 536; *see also* 47 C.F.R. § 76.1302; *Implementation of Sections 12 and 19 of the Cable Television Consumer Protections and Competition Act of 1992: Development of Competition and Diversity in Video Programming Distribution and Carriage*, 9 FCC Rcd 2642 (1993). The rules also specifically prevent a cable operator from demanding exclusive distribution rights or a financial interest in a program service in return for carriage. An aggrieved vendor may file a complaint with the FCC and, if successful, the Commission may order mandatory carriage or establish prices, terms, or conditions for carriage on the defendant's system.

- ***Channel Caps:*** These regulations are designed to ensure a measure of open access for unaffiliated content providers by limiting the portion of channel capacity which cable operators may devote to their own affiliated program services.[65]

- ***Mandatory Carriage of Broadcast Television Signals:*** These extensive regulations compel cable operators not to discriminate against their most potent rivals in supplying local program content—the TV stations licensed to serve the same market.

All of these rules rest on certain fundamental principles that provide independent content providers a fair opportunity to reach cable subscribers and, thus, foster greater openness of transmission networks.[66] Foremost among those principles are (1) a cable operator's obligation to afford non-affiliated content providers access to the technical means of reaching subscribers; (2) open access with respect to rates, terms, and conditions of carriage; (3) equitable treatment with respect to content presentation and viewer selection mechanisms; and (4) extension of reasonable access rights throughout the entire network pipeline to subscribers' receivers—encompassing access to the technical connections, fair treatment with

---

[65] 47 U.S.C. § 536; 47 C.F.R. § 76.504; *Implementation of Sections 11 and 13 of the Cable Television Consumer Protection and Competition Act of 1992: Horizontal and Vertical Ownership Limits*, 8 FCC Rcd 8565 (1993).

[66] In addition to cable-specific regulations, policymakers have demonstrated that they place significant value on efforts to open up transmission systems themselves by establishing the regulatory regime for "open video systems." 47 U.S.C. § 573; *see also, e.g., Implementation of Section 302 of the Telecommunications Act of 1996: Open Video Systems,* 11 FCC Rcd 18223 (1996). OVS is not a new technology but rather a new regulatory framework built upon the public policy goals of providing cable-like services in a way that more fully guarantees open and fair access for non-affiliated content providers to the underlying transmission systems. While not equivalent to common carriage, the OVS rules nevertheless guard against discriminatory treatment of independent content providers carried on such a system. *Implementation of Section 302 of the Telecommunications Act of 1996: Open Video Systems,* 11 FCC Rcd 14369 (1996).

respect to content presentation and viewer selection mechanisms, and extension of access rights throughout the cable network to subscribers' receivers.[67]

* * * *

The foregoing review reveals that open access requirements have served as a cornerstone of communications policy wherever cable operators have been found to threaten competition and consumer choice. The need to effectuate these principles in the context of cable-delivered Internet and other interactive offerings is equally compelling—and justifies conditioning the Commission's approval of the proposed transfer in the manner set forth below.

III. THE FCC SHOULD GRANT THE AT&T/TCI TRANSFER OF CONTROL SUBJECT TO A NARROW OPEN ACCESS CONDITION THAT PRESERVES CONSUMER CHOICE AND COMPETITION IN THE BROADBAND MARKETPLACE

As detailed above, the deployment of last-mile broadband facilities presents a real opportunity to expand and enhance the profound public benefits of the Internet *if* these networks are deployed in a manner that fosters, rather than impedes, consumer choice.

A. An Open Access Condition Will Promote The Delivery Of The Benefits Of Broadband Infrastructures To The Public

Open network infrastructures are critical to the widespread penetration of broadband services and the promotion of loop-to-loop competition between cable operators and alternative providers of last-mile access. In order to ensure that the merger between AT&T and TCI will deliver on its promise and not give rise to gatekeeping concerns, the Commission should grant

---

[67] *See* 47 U.S.C. § 534, 535; 47 C.F.R. §§ 76.57, 76.61, 76.62.

the instant transfer of control subject to an appropriate condition. Rather than mimic the extensive safeguards applicable to common carriers, this open access commitment could take the form of a straightforward and targeted condition: AT&T/TCI may not, directly or through its control of @Home, deny (or be party to affiliation arrangements denying) unaffiliated ISPs open access to cable-based last-mile high-speed data transport capability where such access is provided to an affiliated ISP.[68] This open access condition would ensure that consumers would remain free to select their desired ISP on AT&T/TCI-controlled or -affiliated systems and would not be forced to purchase *two* value-added Internet services to obtain the one that they want.

That is not the case now. No matter how many ways they might seek to obfuscate the matter,[69] one thing is clear: AT&T/TCI have no intention of allowing consumers to reach the ISP of their choice without first purchasing @Home's fully bundled transport access and content package. AT&T/TCI have reaffirmed their intent to require a subscriber to pay for both their high-speed transport capability *and* their affiliated ISP before that subscriber ever reaches AOL or any other non-affiliated ISP.

In contrast, under the AOL open access proposal, consumers would continue to be able to enjoy competition in "first screen" guides to the world of the Internet that allows them direct access to their preferred ISP when they turn on their computers. Securing such choice would encourage rapid consumer adoption of video-enabled Internet services because

---

[68] This would effectively address some 50% of the cable marketplace. Moreover, this FCC action would lead to a change in cable industry policy quickly.

[69] *See supra* note 29 (noting that TCI's answer to Commissioner Ness' question was not responsive).

customers would be able to migrate to those services without foregoing their preferred source of Internet services.

For example, a consumer needs narrowband service to have an e-mail account that can be accessed from anywhere. Cable offerings typically do not provide such roaming access. Thus, if an ISP like Mindspring can offer broadband and narrowband service seamlessly, the consumer can get e-mail with that capability from the same account. In addition, as noted above, the proposed access obligation also would enhance competition in and among providers of last-mile access.

B. While The Relief Sought In This Petition Is Limited In Scope, The Remedy Will Allow The Nascent Broadband Marketplace To Develop Free Of Electronic Gatekeepers

Existing cable safeguards reflect a fundamental policy concern that cable operators' ability and incentive to exercise bottleneck control over their distribution facilities may impede both consumer choice and the development of competitive markets. Application of a reasonable access obligation to AT&T/TCI in the context of a cable broadband data transport capabilities would be a logical outgrowth of these policies. It also would advance the objective of using the least intrusive safeguard necessary to address the potentially harmful effects of this merger on nascent broadband services. In fact, the mere presence of cable-like safeguards (such as some of those noted above in Section II.C) can serve as powerful prophylactic measures that obviate the need for active Commission oversight to foster a pro-competitive broadband marketplace. The open access standards embodied in these existing FCC rules also should provide participants in the Internet access marketplace with general guidance as to the

bounds of permissible conduct, thereby eliminating the need for extensive Commission enforcement.[70]

The proposed access condition is in no sense tantamount to common carriage obligation and would not place an affirmative duty upon AT&T/TCI to make available cable broadband transport capabilities in the first instance. Nor would it impose the interconnection, unbundling, and resale obligations of Section 251 and 252 of the 1996 Act, nor impose other regulatory requirements reserved for common carriers.[71] Rather, it would only seek to ensure that AT&T/TCI offer unaffiliated providers a minimal right of open access—nothing more and nothing less—where the merged entity also offers access to an affiliated provider's service.

C. The Open Access Condition Sought Herein Would Preserve AT&T/TCI's Strong Economic Incentive To Deploy Broadband Technologies And Would Respect The Technical Capabilities Of Cable Operators

The Commission should decline to heed the predictable claims by AT&T/TCI that establishing an open access obligation would eliminate the financial incentive to deploy broadband infrastructures or be infeasible to implement.[72] Such arguments ring hollow

---

[70] *Cf.* 47 C.F.R. § 76.1300, *et. seq.* (carriage agreement rules); 47 C.F.R. v 76.1000 *et. seq.* (program access rules).

[71] *See* 47 U.S.C. §§ 251, 252. To the extent, however, that AT&T/TCI systems come to offer Internet access and telephony services over the same facilities, the Commission may well have future occasion to address the issue of whether such bundled services would properly be regulated as common carriage.

[72] These arguments have already been raised in the Commission's *Section 706 NOI* proceeding, where AT&T threatened that cable operators "will not undertake" the investments to upgrade their cable infrastructure to provide broadband services "if they would then have to provide unbundled access to those upgraded facilities to third parties whose business plans did not include the development and deployment of advanced infrastructures." Reply Comments

(Continued...)

because the condition proposed here is not designed to deny AT&T/TCI the ability to recover their investment in infrastructure (presumably in the same manner in which TCI and other @Home affiliates now recover their investment through existing affiliation deals with @Home). Nor does the proposed condition require the merged entity to alter in material respects its existing—or its planned—technical architecture.[73] Rather AOL merely seeks access to AT&T/TCI's last-mile broadband transport capabilities on terms reasonably comparable to those made available to @Home.

1. The Proposed Access Obligation Would Preserve Financial Incentives To Invest In Broadband Infrastructures

There is little reason to believe, and much reason to doubt, that an open access condition would eviscerate AT&T/TCI's incentive to invest in broadband infrastructure. As Professor Hausman explains:

> [this] argument does not make economic sense. No one has called for price regulation of last-mile high speed data transport by TCI and by other cable companies. TCI could still charge the (unregulated) profit maximizing price for last-mile high speed data transport over its network.... TCI could also still offer a bundled service with @Home Internet service. However, TCI and other cable companies would not be allowed to tie their last-mile high speed data transport with @Home service.... Investment incentives would still exist for TCI and

---

(...Continued)
of AT&T Corp., CC Docket No. 98-146 at 15 (filed Oct. 8, 1998). ("AT&T Reply Comments"). AT&T further claims that providing access to independent ISPs will unduly limit the spectrum capacity available to it for their service offerings.

[73] With respect to economic incentives, AT&T itself has told the Commission that carrying as much content as possible is in its "self interest." Unofficial Hearing Transcript. Moreover, as Commissioner Ness noted in the *en banc* hearing, TCI in "previous conversations well before the announced merger" had been telling the Commission that it already was "well along the way" in "plans for upgrading [its] cable plants." *Id.*

other cable companies to upgrade their networks. This limitation on consumer choice and the competitive distortion caused by tying would be eliminated.[74]

Ensuring that unaffiliated ISPs are afforded access to the merged entity's upgraded cable infrastructure on terms no less favorable than those afforded to @Home could not—as a matter of logic—gut the economic underpinnings and attractiveness behind the existing access arrangements between TCI and @Home. Presumably, these agreements are justified as an economic matter for both parties, allowing TCI to recover its necessary return on investment in @Home while pursuing the continued deployment of broadband infrastructure. Indeed, an open access obligation would affirmatively provide AT&T/TCI with economies of scale and scope—coupled with broader penetration of broadband facilities—that would accelerate their return on investment as more consumers migrate to open broadband networks.[75]

This targeted access condition also leaves AT&T/TCI with a wealth of business opportunities through their relationship with @Home that would, in turn, continue to facilitate investment in broadband infrastructure. Notably, an open access obligation with respect to broadband transport capability does not mean that AT&T/TCI have to structure their business dealings in a fashion identical in all respects for both @Home and unaffiliated providers, so long as unaffiliated providers have comparable opportunities. For example, such an obligation would not limit AT&T/TCI's ability to offer bundled services with their affiliated ISP. Nor

---

[74] *See* Declaration Regarding Investment Incentives of Professor Hausman, MacDonald Professor of Economics, Massachusetts Institute of Technology (MIT), ¶16-17 (attached as Appendix B) ("Hausman Investment Incentives Declaration").

[75] While openness may adversely affect @Home equity values built on the premise that it would not confront any competition, inflated values based on visions of a monopoly hardly warrant government protection. *See U.S. v. Microsoft, supra.*

would the condition stop the merged entity from serving as a single branded, "one-stop shopping" source for a host of data, telephony, and video programming services. Further, the combined AT&T/TCI will be able to continue to draw upon the well-established brand names of both companies to jointly market services with affiliated or unaffiliated ISPs, giving them the opportunity to utilize their respective brands in "best-of-breed" offerings. What a condition *would* do, however, is allow unaffiliated service providers to offer competing bundles of services or best-of-breed offerings on competitively viable terms.

In any event, the Commission knows well (and has been urged by AT&T itself) to scrutinize carefully any threat, direct or indirect, based on the premise that removing a facilities-based service provider's ability to capture *supranormal* economic profits will necessarily eliminate the provider's incentive to deploy or develop new technology.[76] There is no plausible public interest support or economic justification for the claim that investment in broadband facilities may occur only if AT&T/TCI retain the ability to deal exclusively with their affiliated ISP in the provision of last-mile broadband transport.[77] Such tying, as

---

[76] In a number of contexts, AT&T itself has been quick to urge the Commission to reject any ILEC claims that regulatory obligations will discourage investment in advanced services and, in fact, advocates additional regulation of ILEC provision of such services. *Section 706 NOI*, AT&T Reply Comments at i, 7:

> Although the ILECs predictably allege that their deployment of advanced telecommunications services is being hampered by regulation, they offer no arguments that the Commission has not already considered—and correctly rejected—in its recent *Advanced Services Order*.... Nor should the Commission even consider rewarding the ILECs—who have flouted their obligations under the Act—by allowing them to extend their existing monopolies into the market for broadband services.

[77] *See* Unofficial Hearing Transcript (TCI president stating that his company's "video and data plans and aspirations were, to be frank, fairly well along" prior to the merger announcement). Furthermore, it appears the many existing access rules now applied to cable

(Continued...)

Professor Hausman notes, "has never been considered necessary for the socially optimal level of innovation in the U.S. economy."[78] Rather, it appears that the driving incentive for affiliate favoritism would be to prevent video-enabled Internet service competition with the affiliated ISP, thereby preserving the artificially inflated equity value of the affiliated entity created by AT&T/TCI's perceived gatekeeper position.[79] Accordingly, the FCC should reject any assertion by AT&T/TCI or others that a reasonable access safeguard will serve as a fatal disincentive to deploy broadband technology.

(...Continued)
have not stripped cable operators of all incentive to upgrade their systems. *Accord, Hush-a-Phone Corp. v. U.S.,* 238 F.2d 266 (D.C. Cir. 1956); *Carterfone*, 13 F.C.C. 2d 420 (1968) (both rejecting arguments that interconnection/attachments would retard investment incentives).

[78] Hausman Investment Incentives Declaration, ¶20. To the extent @Home cable partners tellingly see the safeguard proposed here as analogous to anti-incentive notions of "stripping inventors of patent protection," Professor Hausman instead explains:

> [The argument] that investors should be allowed to tie their inventions to other products or services so that their profits will increase, ... fails to realize that it is well-settled patent law that the patent owner can charge the profit maximizing price for the use of his invention, but the patent cannot tie the use of the patented product to other goods or services. Indeed, tying is often taken to be patent misuse and can provide grounds for revocation of the patent."

Id. ¶19, *citing* Cablevision's Reply Comments in *Section 706 NOI.* Patent protection, of course, affords the mechanism of open licensing and reasonable royalty provisions, rather than tying arrangements, to preserve investment incentives.

[79] Nor should there be any reasonable expectation by investors in @Home that the AT&T/TCI gatekeeper position will be maintained, as prominent analysts have predicted that it is inevitable that cable will be opened. *See* Scott C. Cleland, The Precursor Group, Legg Mason Research Technology Team, *Will the Cable Industry Have to Unbundle and Open Its Network?* (Sept. 22, 1998) .

2. The Proposed Access Condition Is Practical As A Technical Matter

AOL's proposal for a targeted access condition would likewise not impose significant technical burdens on affected cable systems. Simply put, it would require only that AT&T/TCI treat affiliated and unaffiliated ISPs in a substantially equivalent way with respect to access to their high-speed transport facilities, including the same type of reasonable technical connections provided to @Home.

As shown in the attached exhibit, such a reasonable access obligation would be feasible to implement.[80] AT&T/TCI's high-speed broadband platform may readily accommodate additional ISPs through several access points, depending on the technical configuration of the operator's system. For example, ISPs may connect at the "network side" of the device that offers access to the cable operator's high-speed last-mile infrastructure—the Cable Modem Termination System ("CMTS"). These connections can be readily accomplished using industry-standard interfaces, such as Asynchronous Transfer Mode ("ATM") or 100Base-T Ethernet. In addition, the specific means of connection to the CMTS will be function of selection made by the CMTS owner.

In addition, allowing connection of unaffiliated ISPs will not reduce the available bandwidth on a cable system or otherwise degrade overall system performance.[81] Performance criteria such as system throughput and capacity issues that might arise will be a function of the total number of subscribers on the data service, and not a function of the number of ISPs.

---

[80] *See* Technical Affidavit of Suk S. Soo, Vice President—Special Projects, AOL Technologies, ¶ 4 (attached as Appendix C) ("Technical Declaration").

[81] *Id.*

Indeed, the number of service providers that can be accommodated is limited only by the number of ports made available at the CMTS-NSI, which in theory is unlimited, in practice, it is probably more than the number of service providers that may choose to obtain access.[82]

Beyond these technical explanations, the partners in @Home themselves appear to have accounted for the possibility of non-exclusive—*i.e.*, multiple ISP—access to their high-speed data transport capabilities in the terms of their own partnership agreement.[83] Both technical and contractual evidence thus belies the predictable claims that it would be technically impossible to accommodate multiple ISPs over cable's broadband infrastructure.

IV. THE COMMISSION HAS BROAD AUTHORITY UNDER SECTION 310(D) TO IMPOSE TARGETED REMEDIAL CONDITIONS NEEDED TO GUARD AGAINST POTENTIAL ANTICOMPETITIVE EFFECTS OF THE PROPOSED MERGER.

The FCC cannot authorize the transfer of control of a CARS license unless it finds that such a transfer would serve the public interest. Accordingly, the Commission repeatedly has found that it may impose on a cable merger any remedial conditions needed to render the merger consistent with the public interest. Such conditions may be prophylactic in nature; there is no requirement that the Commission make new policy only through formal notice-and-

---

[82] Technical Declaration, ¶ 4. Consequently, AT&T/TCI's ability to provide telephony services will not be reduced significantly by providing access to unaffiliated ISPs.

[83] The exclusivity provisions in that agreement provide TCI's major MSO partners with the right to cancel the exclusivity limitation on their systems upon a transfer of control of TCI. See At Home Corporation, Securities and Exchange Commission Form S-3 at 7 (filed Jul. 28, 1998) <http://www.sec.gov/Archives/edgar/data/1020620/0000929624-98-001292.txt> ("@Home Form S-3"). *See* @Home Reply Comments at 7; @Home Form 10-Q at 8. Exercise of this option would appear to permit those companies to make their high speed transport capabilities available to other ISPs in addition to @Home.

comment rulemaking. Further, because Congress recently declared that the public interest would be served by the rapid deployment of advanced broadband communications service to all Americans, the FCC's public interest mandate suggests the propriety of narrow, targeted conditions that will promote lawmakers' goal of rapid deployment.

A. The Commission Has Broad Authority To Implement Reasonable, Targeted Conditions On The Transfer Of CARS Licenses Where Necessary To Safeguard The Public Interest

The FCC can authorize the transfer of control of TCI's CARS licenses to AT&T only if such a transfer would serve "the public interest, convenience, and necessity."[84] The "public interest" standard of Section 310(d) "is a flexible one that encompasses the 'broad aims of the Communications Act.'"[85] These broad aims include, *inter alia*, "promotion of the competition policies of the Sherman and Clayton Acts, and enhancing access to advanced telecommunications and information services in all regions of the Nation."[86] In evaluating whether a proposed transaction would serve the public interest, the Commission may take into account "trends within, and needs of, the telecommunications industry."[87]

---

[84] *See* 47 U.S.C. § 310(d). The transfer of CARS licenses is governed by 47 U.S.C. § 310(d). *See Amendment of Part 78 of the Commission's Rules Concerning Licensing Procedures and Reporting Requirements in the Cable Television Relay Service*, 100 F.C.C.2d 1136, 1139-40 (1985).

[85] *AT&T/Telport Order* at ¶ 11 (quoting *Bell Atlantic/NYNEX Order*, 12 FCC Rcd. 19985, 19987 (1997)).

[86] *Id.* (internal citations, punctuation marks, and footnotes omitted); The Commission's public interest analysis, however, is "informed by antitrust principles, but not limited by the antitrust laws." *Bell Atlantic/NYNEX Order*, 12 FCC Rcd. at 20003; *see also Tele-Communications, Inc. & Liberty Media Corp.*, 9 FCC Rcd. 4783, 4785 (Cable Servs. Bur.

[87] *AT&T/Teleport Order*, ¶ 12.

As the FCC has frequently noted, "the Communications Act's *fundamental purpose* [is] ... 'to make available, so far as possible, to all the people of the United States ... a rapid, efficient, nation-wide, and world-wide wire and radio communications service.'"[88] This purpose applies with equal force to advanced telecommunications services.[89] As noted above, Congress has recently reiterated that "the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans" would serve the public interest.[90]

In general, the Commission has consistently concluded that its public interest responsibilities under Title III require it to examine competitive issues raised by proposed CARS transfer applications.[91] When the FCC determines that a proposed transfer of control of a CARS license "would result in anti-competitive effects, [it] may impose appropriate remedial conditions."[92] In fact, the agency repeatedly has imposed remedial conditions on transfers of

---

[88] *Telecommunications Services Inside Wiring Order*, 13 FCC Rcd 3659, 3704 (1997) (quoting 47 U.S.C. § 151) (emphasis added); *cf. Mobiletel, Inc. v. FCC*, 107 F.3d 888, 891 (D.C. Cir. 1997) (Section 151 generally requires the Commission to utilize measures and processes that streamline the deployment of communications licenses and services).

[89] *See* 147 U.S.C. § 254(b)(2) ("Access to advanced telecommunications and information services should be provided in all regions of the Nation.").

[90] Telecommunications Act of 1996 § 706(a), Pub. L. No. 104-104, 110 Stat. 56 (1996).

[91] *Tele-Communications, Inc. and TeleCable Corp.*, 10 FCC Rcd 2147 (Cable Servs. Bur. 1995) (citing Cable Services Bureau decisions). The Commission "also has a mandate under the Act to encourage technological innovation in communications and to expedite the introduction of new technology subject to other public interest considerations." *Carolina Tel. & Tel.Co.*, 10 FCC Rcd 1583, 1585 (Common Carrier Bur. 1994) (citing 47 U.S.C. §§ 151, 157, 218).

[92] *Id.*; *see also Consolidated Application of AT&T for Specified Bell System Companies for Authorization Under Sections 214 and 310(d) of the Communications Act of* 1934, 98 F.C.C.2d 141, 152 n.38 (1984) ("It is clear that this Commission can condition a license or transfer of license under Title III."); *Bell Atlantic/NYNEX Order*, 12 FCC Rcd at 20002 n.62

(Continued...)

control of CARS licenses where it has found that such conditions were reasonable and necessary to render the proposed transfers consistent with the public interest.[93] Courts have generally affirmed such exercises of the Commission's authority.[94]

It would neither maximize use of radio facilities nor satisfy the FCC's competition policies for a single company to be allowed to deny consumer choice in Internet services, by refusing to sell to unaffiliated service providers the high-speed data transport capabilities it provides to its own affiliated services. Therefore, consistent with both the agency's general authority and with Congress's recent policy directive on advanced services, the Commission should take proactive steps to insure that the CARS license transfers proposed by AT&T/TCI will not facilitate a merger that could delay the deployment of advanced services to all Americans.

(...Continued)
(1997) ("If the Commission is able to determine that [a Title III license transfer] application would serve the public interest if particular conditions are met, the Commission can grant the application subject to compliance with the specified conditions.") (citing cases).

[93] *See, e.g. Tele-Communications, Inc. and TeleCable Corp.*, 10 FCC Rcd at 2148; *Cox Cable Communications, Inc. & Times Mirror Co.*, 10 FCC Rcd 1559, 1561, 1563 (Cable Servs. Bureau 1994).

[94] *See, e.g., Western Union Tel. Co. v. FCC*, 544 F.2d 346, 355 (3d Cir. 1976), *cert. denied*, 429 U.S. 1092 (1977) (noting "the brute fact" that the FCC may require license transfer applicants to make a "voluntary waiver of rights in order to secure a benefit not otherwise obtainable," where the FCC considers such a *quid pro quo* to be necessary to "serve[] the public convenience and necessity in assuring ... the provision of services and facilities....") (citations omitted).

B. Where The Effects Of A Transfer Might Not Otherwise Be Directly Addressed By Existing Regulatory Precedent, Prophylactic Safeguards Are Particularly Appropriate

In cases that involve potential "anticompetitive effects flowing from a merger which may not be addressed or remedied by the Commission's rules," the Commission has found it particularly appropriate to apply prophylactic safeguards in order to protect the public interest.[95] In the area of high-speed cable delivery of advanced telecommunications services, dynamic technological change and a rapidly evolving marketplace together have created competitive issues that simply did not exist when the Commission adopted its current rules governing cable services. Specifically, as discussed in Section II, *supra*, the proposed merger participants seek to create a single electronic gatekeeper, denying high-speed data transport capabilities to competitors and thus depriving consumers a choice among high-speed Internet access services. Because cable's significant emerging role in providing advanced services was not specifically contemplated by existing Commission rules, reasonable and targeted prophylactic safeguards are warranted here.[96]

---

[95] *Tele-Communications, Inc. and Liberty Media Corp.*, 9 FCC Rcd 4783, 4785 (Cable Servs. Bur. 1994). *Accord id.* ("effective review at the initial stage of transaction (*i.e.*, the license transfer) provides a prophylactic mechanism by which the Commission can anticipate and address the potential anticompetitive effects resulting from a proposed merger beforehand, rather than await the filing of individual complaints.") (parentheses in original).

[96] The parties and relevant cable interests argued in the recent advanced services proceeding that the Commission lacks authority to promulgate general rules requiring cable companies to provide access to upgraded networks used to provide advanced services. *See e.g.*, Comments of @Home at 14, NCTA at 12-13, Cablevision at 5-6, AT&T at 9-11, Comcast at 15-16, Cox at 5-6, Time Warner Cable at 6-7, filed in response to the Commission's *Section 706 NOI*. AOL strongly disagrees with the cable industry's cramped view of the Commission's rulemaking authority in this area. Even if, *arguendo*, the Commission did lack authority to promulgate such general rules, however, it then would be all the more important for the Commission to act in the present proceeding to impose any

(Continued...)

Courts would review such safeguards under a highly deferential standard. Specifically, when reviewing the FCC's judgments regarding a "fast-moving field of technology [to which] ... no congressional action [has been] geared specifically ..., a reviewing court owes particular deference to the expert administrative agency's policy judgments and predictions, its forecasts of the direction in which future public interest lies."[97] Further, where the Commission perceives the need for a prophylactic rule, courts will "likely defer to the agency's need for an easily administered rule."[98] In such circumstances, even "[s]ome over- and under-inclusiveness would not be fatal to a regulation if the agency gave a reasonable justification for administering only rough justice."[99] For this reason, the "open access" requirements suggested herein should be applied to the proposed AT&T/TCI merger, even if the FCC were to conclude that the present application proceeding is not an appropriate vehicle for formulating a universal solution to the problem of cable gatekeepers over broadband transport

---

(...Continued)
prophylactic safeguards needed to protect the public interest in timely fashion.

97 *Wold Communications, Inc. v. FCC*, 735 F.2d 1465, 1468 (D.C. Cir. 1984) (internal quote marks omitted) (citing cases). Although *Wold Communications* involved judicial review of an FCC rulemaking, its reasoning applies equally in the present context. The issue in *Wold* is the degree to which courts must defer to policies adopted by the FCC pursuant to its predictions of the future. The context in which such policies are implemented is irrelevant; the FCC has broad authority to act through either rulemaking or adjudication and different standards of review do not apply. *Bechtel v. FCC*, 957 F.2d 873, 881 (D.C. Cir. 1992), *cert. denied*, 506 U.S. 816 (1992). Indeed, because an applicant cannot accept a conditional Title III transfer authorization and then appeal the conditions imposed, *see Tribune Co. v. FCC*, 133 F.3d 61, 66-67 (D.C. Cir. 1998), the issue decided in *Wold* is unlikely to reach a court in the application context.

98 *Cellwave Tel. Servs. L.P. v. FCC*, 30 F.3d 1533, 1536 (D.C. Cir. 1994).

99 *Id.* (citation and punctuation marks omitted).

facilities supporting high-speed Internet access services.[100] It should be noted, however, the proposed condition as formulated would reach approximately 50% of the industry. Clearly, the broad reach of the cable systems operated by TCI-controlled @Home's owners and affiliates demonstrate both the need for and the potential effectiveness of any condition imposed in this proceeding.

Further, the fact that the specific safeguard proposed herein has not been promulgated pursuant to a formal notice-and-comment rulemaking or applied in a previous transfer application is of little consequence. The Commission "may, in its discretion, choose to make new policy through either rulemaking or adjudication."[101] Further, the Commission "cannot avoid [its] responsibilities in an adjudication properly before [it] by looking to a rulemaking, which operates only prospectively."[102] Thus, the agency cannot authorize a transfer unconditionally "merely because there was no general rule or regulation covering the matter."[103] In short, where necessary to fulfill its statutory responsibility to protect the public interest, the Commission *must* exercise its power to make new policy through adjudication.

---

100 *See BA/NYNEX Order*, Part V. *See also SBC Communications, Inc. v. FCC*, 138 F.3d 410, 421 (D.C. Cir. 1998) (the FCC enjoys "the option to make policy choices in small steps, and only as a case obliges it to." (citing *SEC v. Chenery Corp.*, 332 U.S. 194 (1947)); *Hawaiian Tel. Co. v. Public Utils. Comm'n of State of Hawaii.*, 827 F.2d 1264, 1272 (9th Cir. 1987), *cert. denied*, 487 U.S. 1218 (1988) ("the FCC can tailor directives to the needs of particular circumstances").

101 *Bechtel v. FCC*, 957 F.2d 873, 881 (D.C. Cir. 1992), *cert. denied*, 506 U.S. 816 (1992); *see also SEC v. Chenery Corp.*, 332 U.S. 194, 203 (1947).

102 *AT&T v. FCC*, 978 F.2d 727, 732 (D.C. Cir. 1992), *cert. denied*, 509 U.S. 913 (1993) (citing *Bowen v. Georgetown Univ. Hosp.*, 488 U.S. 204, 208 (1998)).

103 *Chenery Corp.*, 332 U.S. at 201.

V. THE REQUISITE *BELL ATLANTIC/NYNEX* MERGER ANALYSIS CONFIRMS THE NEED FOR A TARGETED ACCESS CONDITION

To receive approval for a proposed merger such as that between AT&T and TCI, the Commission requires applicants to demonstrate that "the transaction will be in the public interest, convenience and necessity,"[104] and that any "harms to competition ... are outweighed by benefits that enhance competition."[105] If applicants cannot carry this burden, "the applications must be denied."[106] Specifically, under the *Bell Atlantic/NYNEX* analytical framework, merger applicants must:

- Define the relevant product market(s);
- Define the relevant geographic market(s);
- Identify the market participants, especially the most significant market participants, and any barriers to entry into the relevant market(s);
- Evaluate the potential effects of the merger on competition; and
- Identify public interest benefits/efficiencies that enhance competition and therefore outweigh any anticompetitive effects.[107]

AOL has described above the likely adverse effects on competition and the public interest from the merged entity's announced intention to accelerate the deployment of cable broadband data services for Internet access in a closed network environment. An analysis of

---

[104] *BA/NYNEX Order* at 20009. The Commission's "public interest authority is very broad and encompasses the goals of promoting competition and deregulation." *Id.* at 20006.

[105] *Id.* at 19987. The Commission has stated that: "[i]n order to find that a merger is in the public interest, we must, for example, be convinced that it will enhance competition." *Id.*

[106] *Id.*; see also *id.* at 20007 ("Failure to carry the burden of proof means that the Commission must deny the applications or designate them for hearing.").

[107] *See BA/NYNEX Order* at 20008-9.

the additional elements to be considered under the *Bell Atlantic/NYNEX* framework confirms this showing. Although AT&T/TCI suggest that *Bell Atlantic/NYNEX* is inapplicable to their merger, they include in their CARS license transfer applications a "just-in-case" *Description of Transaction* that focuses, for Internet-related purposed, exclusively on "end-user Internet services," and summarily dismisses any potential for anticompetitive impact.[108] However, this discussion omits an essential market that will be adversely affected by their combination: the last-mile broadband data transport service "input" market.[109] Such high-speed data transport service is a key input purchased by ISPs for use in the provision of upgraded Internet services to consumers.

---

[108] *See* Description of Transaction at 34-35. AT&T/TCI state that "because the proposed transaction ... does not involve a horizontal merger in any market, ...it is [not] necessary for the FCC, in determining whether the Merger is in the public interest, to conduct the three step analysis of the potential competitive effects of the Merger" used in the *BA/NYNEX Order*. *Id.* at 14. However, the FCC has confirmed as recently as July 1998 in the *AT&T/Teleport Order* that the *BA/NYNEX* analytical framework applies to vertical and horizontal mergers alike. *See AT&T/Teleport Order*, ¶¶ 42-62. Moreover, the Commission has analyzed the anticompetitive effects of mergers on input markets in the context of mergers that have vertical components, such as the AT&T/TCI merger. *Id. See also Merger of MCI Communications Corporation and British Telecommunications plc*, 12 FCC Rcd 15351, 15409-30 (1997) ("*MCI/BT Order*"). In essence,

> the "[v]ertical effects that harm competition generally depend on the vertically integrated firm possessing market power in an upstream 'input' market and taking actions in that input market that leverage this market power in the downstream 'end user' market. These downstream effects could harm consumers through increases in prices, decreases in quality, or a reduction in alternatives in end-user markets."

Id. at 15409. In other words, the Commission must assess whether "the merger ... will increase the ability or the incentive of the vertically integrated firm to affect competition in any downstream end-user market." *Id.* at 15410.

[109] Description of Transaction at 34-35. An input is a component of a service that, when combined with other components, creates the end product that is offered to the consumer or end user. For example, chocolate is an input to candy bars.

Moreover, the applicants fail to address the adverse public interest effects that their merger will have on this important input market at a critical stage in the rollout of broadband Internet access offerings. They also remain silent with respect to the merger's impact on consumer choice, on the opportunities for nationwide distribution of cable-delivered Internet content services, on access to critical last-mile facilities, on the development of loop-to-loop competition generally, and on the growth of the Internet itself.

TCI-controlled @Home already has control over virtually the only last-mile broadband data transport facility passing 58.5 million homes across the United States—high-speed cable.[110] Moreover, TCI historically has exercised that control to deny ISPs, competitive with TCI @Home and @Home affiliates generally, access to upgraded cable facilities. As such, consumers are effectively prevented from obtaining (or, at a minimum, required to pay an additional price to obtain) upgraded Internet service directly from suppliers of their choice. Given AT&T's apparent plan to become a national broadband gatekeeper—"they will have to get there through us"—the merger will only accelerate and exacerbate the adverse public interest consequences of TCI's control over last-mile high-speed transport facilities in many geographic markets.[111]

---

[110] @Home Form 424B4 at 2. The only other significant provider of last-mile cable broadband data transport service for high-speed Internet access is Road Runner, which passes over 27 million homes, 7.5 million of which are currently passed by upgraded, two-way cable. See Forrester Report at 5. Because @Home and Road Runner each negotiate exclusivity agreements with local MSO, they are not in overlapping markets and therefore do not compete. *See* @Home Form S-3 at 10.

[111] Over the next year, @Home's marketplace share is expected to grow significantly; within four years, the expectation is that 80% of the estimated 16 million homes with high-speed Internet connections will rely on cable modems. *See* Forrester Report at 2.

With AT&T/TCI as the broadband cable gateway in a multitude of communities: (1) many customers will be deprived of their choice of broadband Internet services, (2) those customers will be forced to subscribe to @Home in order to obtain access to their preferred provider, and (3) the diversity of available high-speed Internet access services and information sources will be unreasonably limited. As explained above, this will interfere with the full development of loop-to-loop competition and stifle growth of the Internet. Accordingly, the Commission must take this opportunity to address the merged entity's denial of consumer choice in the last-mile broadband data transport services input marketplace to ensure that the benefits of competition in cable broadband services, and between cable-based and telephone-based last-mile data transport services, are fully realized.

A. AT&T/TCI Failed To Identify The Last-Mile Broadband Data Transport Input As A Relevant Market

As noted above, AT&T/TCI contend that there is one relevant Internet-related product market that will be affected by their merger, that for end-user "Internet services."[112] However, economic analysis demonstrates that the last-mile broadband data transport services input market likewise is a relevant market for purposes of assessing whether AT&T/TCI's combination is in the public interest.[113]

---

[112] Description of Transaction at 34-35; *see also id.* at 15-16 ("Prior FCC opinions and orders suggest that the FCC might consider as potentially relevant for analysis under the Commission's market analysis framework ... Internet services.").

[113] *See* Hausman Market Definition Declaration.

In general, the agency defines a product market as "a service or group of services for which there are not close demand substitutes"[114] and has determined that product markets should be "more narrowly defined" than broadly defined.[115] With respect to last-mile broadband data transport offerings, the FCC has recognized that these offerings are unique transport technologies that make possible upgraded end-user Internet access, both in terms of functionality and speed.[116] Moreover, both the FCC and @Home have recognized that cable modems and upgraded cable network facilities are critically important emerging technologies for providing such broadband data transport services to ISPs.[117] Indeed, because there is no substitutable service that can be used to provide the same functionality and speed, last-mile broadband data transport services comprise a distinct input product market.

---

[114] "To determine relevant product markets, the Commission must consider whether if, in the absence of regulation, all carriers raised the price of a particular service or group of services, customers would be able to switch to a substitute service offered at a lower price." *BA/NYNEX Order* at 20015.

[115] *Motorola, Inc., Transferor, and American Mobile Satellite Corporation, Transferee, for Consent to Transfer Control of Ardis Company*, 13 FCC Rcd 5182, 5193-94 (1998). "Not only does the Commission have the authority to narrowly define product markets if it deems appropriate, ... but it also expressly anticipated the need to define relevant product and geographic markets more narrowly in the *Second Annual CMRS Competition Report*." *Id.* at 5194 (*citing* Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Radio Services, *Second Report*, 12 FCC Rcd 11266). Applying the principle of narrow definition of Internet service markets, it follows that the agency concluded that for purposes of analysis in the *WorldCom/MCI Order* that "[t]here are three classes of participants in the Internet: end users, Internet service providers (ISPs), and Internet backbone providers (IBPs)." *WorldCom/MCI Order*, ¶ 143 (citation omitted).

[116] *Digital Tornado* at 73-74.

[117] Jermoluk Press Club Speech. *See* Forrester Report at 2 (explaining that because of technological limitations, only 55% of homes in areas served by ADSL equipped central offices can in fact order DSL); *See also Digital Tornado* at 70-71; OPP White Paper at 76.

For example, AOL currently "buys" narrowband transport services from LECs. To provide broadband services, AOL would need to buy broadband data transport, because AOL cannot use narrowband to provide broadband services.[118] In terms of functionality, broadband transport is inherently distinct from narrowband transport because it permits the simultaneous, two-way delivery of data, voice, and video over a single line. And, unlike narrowband dial-up service, current broadband offerings require no dial-up or metering. For the consumer, this means that the service is always on.[119]

With regard to capacity, broadband data transport service using high-speed cable offers throughput speeds from 100 to 1000 times faster than a typical telephone connection.[120] This provides throughput capabilities sufficient for multimedia and full-motion video applications. Ultimately, broadband data transport's capacity will permit a full range of video, voice, and data service offerings competitive to existing cable system and telephone company offerings.

Professor Hausman's analysis confirms the significance of these factors for market-definition purposes. Using economics, markets can be identified by assessing the pricing and demand effects between products. Professor Hausman observes that, although ISPs may purchase either last-mile narrowband transport or last-mile broadband transport for the

---

[118] Applying the FCC's and Department of Justice's *Horizontal Merger Guidelines* "significant non-transitory price increase" test, a significant, non-transitory price increase would not cause ISPs to switch from using broadband data transport to narrowband dial-up transport to deliver upgraded Internet service to consumers, because narrowband transport is not a comparable input both in terms of functionality and speed. *See generally* Hausman Market Definition Declaration.

[119] Jermoluk Press Club Speech ("This is a totally different experience; there's no dial-up, no metering—if you're on, you're on. Instantly. 24X7."); See OPP White Paper at 76.

[120] *Id.*

provision of Internet access, the price of narrowband does not constrain the price of broadband.[121] In addition, the demand for last-mile broadband data transport is not affected by changes in the price of narrowband transport, *i.e.*, their cross-elasticity is "essentially zero."[122] Accordingly, Professor Hausman concludes that the last-mile broadband data transport and last-mile narrowband Internet data transport are different input markets.[123]

While other last-mile broadband data transport technologies are being developed and deployed, including Digital Subscriber Line ("xDSL") offerings such as asymmetric DSL ("ADSL"), high-speed cable is emerging as a dominant broadband Internet access vehicle for many consumers, at least for the relatively near term.[124] Although ADSL is expected to be deployed by wireline local exchange carriers in various regional areas, recent projections suggest that subscribers to Internet services using cable-based last-mile broadband data

---

121 Hausman Market Definition Declaration, ¶¶ 6-10.

122 *Id.*, ¶¶ 11-15.

123 *Id.*, ¶¶ 3, 15.

124 Though deployed in some areas, integrated services digital network ("ISDN") is not now or expected to be in the next few years a widely-used broadband technology due to significant technological and speed constraints. OPP White Paper at 76. Other wireless broadband technologies are still in the very early stages of development and, indeed, generally are not yet being offered to consumers. Even so, wireless technologies such as cellular and PCS channels cannot offer the same speeds as broadband cable services because of their use of narrowband spectrum. Multichannel multipoint distribution service ("MMDS") and local multipoint distribution service ("LMDS"), even if permitted by the Commission to offer Internet transport services, are not widely available. Moreover, MMDS' potential to offer broadband capability is limited because it relies on "line-of-sight" technology and cannot function in locations where the view to the operator's radio receiver is obstructed. Geosynchronus and geostationary satellite systems face comparable technical problems caused by the great distances over which information must travel when it "bounces" off a high-altitude satellite, and Low Earth Orbit ("LEO") systems are not expected to be fully operational until at least after the Year 2000.

transport service will far exceed Internet subscribers employing an ADSL-based transport service over the next two to four years.[125] Indeed, @Home's CEO has argued that ADSL will not be a significant underlying broadband technology for several years, stating that "cable has about a two year lead that I believe we'll be able to sustain even as the competing technologies mature."[126] But, even were ADSL service generally available in some areas, it is functionally distinct from broadband cable in terms of speed and expense.[127] Moreover, almost one-half of all homes served by ADSL-equipped central offices may still not be able to make use of ADSL because of technological limitations.[128]

As such, high-speed cable is emerging as an early leader in the separate input product market for last-mile broadband data transport service. The adverse public interest

---

[125] Based on a study by Forrester Research, cable modem access will be the predominant high-speed Internet access mechanism for at least the next five years. Cable modems will have 700,000 users and DSL 25,000 users by the end of 1998. By the year 2000, 4.3 million consumers are projected to use cable modems, with only 400,000 users projected to use DSL. Forrester Report at 5. *See also* Kevin Maney, *Net access: Cable modems surge*, USA Today, October 5, 1998, at 1B.

[126] *Jermoluk Press Club Speech.* Notably, the Horizontal Merger Guidelines consider the impact of a firm's future supply of a good/service on the relevant product and geographic market *only* if that firm's entry "can be achieved within two years from initial planning to significant market impact." *1992 Horizontal Merger Guidelines*, 57 Fed. Reg. 41,552, 41,562 (1992).

[127] While cable modem service runs at about 1-2 Mbps both upstream and downstream (and at 5-10 Mbps in optimal conditions), ADSL-lite runs at only 128 Kbps upstream and 1.5 Mbps downstream. Forrester Research, Inc., *Internet Access Winners* at 9 (January 1998), contained in Bell South Comments to *Section 706 NOI.* In addition, cable modem service reportedly averages only $35-$55 per month, while ADSL service reportedly averages $60-$110 per month. *Id.* at 4.

[128] "Because of technological limitations, only 55% of homes could get DSL." Maney, *supra* note [140].

consequences detailed above—achievable through the exploitation of TCI's existing control over the availability of upgraded cable facilities, as supplemented by AT&T's capital resources and service bundling opportunities—compel the FCC to evaluate the impact of the merger on this critical input market.

B. The Relevant Geographic Markets Are All Areas In Which TCI Owns Cable Facilities Or Controls Exclusive Dealing Arrangements

Under the *Bell Atlantic/NYNEX* analysis, "[a] geographic market aggregates those consumers with similar choices regarding a particular good or service in the same geographical area."[129] In their Description of Transaction, however, AT&T/TCI did not identify the markets in which TCI directly or substantially owns the cable facilities and the upgraded transport capabilities needed to provide last-mile broadband data transport service. Nor did they set out the geographical markets in which TCI exercises similar control over other systems through the exclusivity provisions in TCI-controlled @Home's agreements with its MSO owners and affiliates.

Like the market for Internet access service itself, the market for last-mile broadband data transport used as an input to that service is inherently local, although restrictions in this local "distribution" market will inevitably affect the national market for ISP and Internet-related content services. TCI, itself or through its affiliates, provides cable services to at least 20.2 million customers and passes a minimum of 34.1 million homes throughout the United

---

[129] *BA/NYNEX Order* at 20016 (citing *Tampa Elec. Co. v. Nashville Co.*, 365 U.S. 320, 327 (1961)).

States.[130] Moreover, through its MSO owners and affiliates, TCI-controlled @Home is available in 169 communities, has "exclusive access to over 50% of the households in the U.S. and Canada"—a total of 58.5 million homes—and "accounts for 60% of all two-way cable modem homes marketed in the U.S. and Canada today."[131] Indeed, TCI@Home alone already provides high-speed data transport service to 57 communities.[132] AT&T has committed the merged entity to accelerating this upgrade across the county, such that it is 60% complete by year-end 1999 and 90% complete by year-end 2000.[133]

Thus, the FCC must take into consideration the impact of the AT&T/TCI merger on each of these relevant geographic markets—including both those where TCI and TCI@Home provide service directly and those in which TCI-controlled @Home provides services through its other MSO owners and affiliates.[134]

C. Potential Facilities-Based Competitors To Cable Data Transport Face Substantial Barriers To Entry In Last-Mile Markets

AT&T and TCI contend in their *Description of Transaction* that there are any number of "actual competitors" providing Internet access service to end users.[135] In many geographic

---

130 *See* Description of Transaction at 6-7.

131 @Home's Form 424B2 at 2-3.

132 *See* @Home by TCI.NET/Availability, www.tci.net.tcinet.pgs/avail.htm1.

133 *See* Armstrong Answers.

134 The FCC will "consider groups of point-to-point markets where customers faced the same competitive conditions." *BA/NYNEX Order* at 20017 (citing *LEC In-Region Interexchange Order*, ¶ 67, n.181).

135 Description of Transaction at 35.

areas, however, TCI, as the local cable monopolist, together with the LECs offering ADSL, are the only existing providers of last-mile broadband data transport service. These entities are the relevant market participants for purpose of this analysis.

In assessing competitors in the relevant product and geographic markets, the Commission examines both "actual" and "precluded" competitors. "Actual competitors" are "firms that are now offering the relevant products in the relevant geographic market[s]."[136] "Precluded competitors" are "firms that are most likely to enter but have until recently been prevented or deterred from market participation by barrier to entry [which] the 1996 Act seeks to lower."[137] Applying this standard, TCI generally controls one of at best two last-mile broadband data transport networks in the relevant product and geographic markets.[138] With the exception of those markets where facilities-based ADSL is deployed or another cable operator is offering broadband service, TCI is the only provider of last-mile high-speed data transport service using any medium.[139] Moreover, as noted above, even where xDSL is nominally available, it reportedly is now being deployed and used at a significantly slower rate than broadband cable.

---

136 *BA/NYNEX O*rder at 20020 (citation omitted). Thus, the FCC examines "the market participants that have, or are likely to speedily gain, the greatest capabilities and incentives to compete most effectively and soonest in the relevant market." *Id.* at 20020-21.

137 *Id.* at 20020 (citation omitted).

138 In some cases, other providers such as utility companies, are promising limited competition.

139 As discussed above, Road Runner also controls high-speed cable and uses it to provide broadband Internet access. DSL is being provided only in a limited number of markets.

"Potential" facilities-based competition for high-speed cable (other than future LEC xDSL offerings) is highly unlikely because potential competitors face enormous barriers to entry into this input market. Simply put, facilities-based overbuilds of upgraded cable networks are rarely attempted, even since the 1996 Act permitted telephone companies to participate in that market. Similar barriers exist for overbuilds of telephone networks and still more barriers to the rollout of xDSL specifically have been alleged in Section 706 proceeding.[140]

In addition, from a buyer's perspective, TCI's exclusive arrangement with @Home foreclosed TCI from selling the last-mile cable broadband data transport input to competing ISPs so that they can provide upgraded Internet access service directly to their customers. This control is extended beyond TCI's own systems by the requirement that @Home prevent its other MSO owners and affiliates from dealing with unaffiliated ISPs directly, instead conducting all access negotiations through TCI-controlled @Home itself.[141] As a result, the nationwide market for distribution of cable-delivered content services is adversely and unreasonable affected.

---

[140] Other than the incumbent LEC, providers of xDSL will not generally have their own networks. Thus, there will be few new relevant competitors actually supplying the last-mile broadband data transport service input. Indeed, Section 251 of the 1996 Act is premised on the fact that full alternative network facilities-based competition in many markets will not be quickly achieved. As such, Section 251(c) of the 1996 Act requires ILECs to provide "unbundled network elements" and "resale" of services at a discount to requesting competing carriers.

[141] It should also be noted that much of the remainder of the cable industry has joined forces in Road Runner/MediaOne, which has employed a similar "exclusive" business model.

TCI's and @Home's refusal to deal with other ISPs has additional negative consequences for consumers as well. TCI not only refuses to sell, and to allow the other participants in @Home to sell, the last-mile broadband data transport service input to other competitors, but currently only offers consumer access to last-mile broadband data transport functionality if they subscribe to the @Home online service. Subscribers who desire to combine the speed of cable modem service provided over upgraded cable with the offerings of another ISP must pay for both @Home's service as well as the other ISP's service. This practice directly contravenes existing cable policy embodied in the anti-buythrough regulations discussed above.

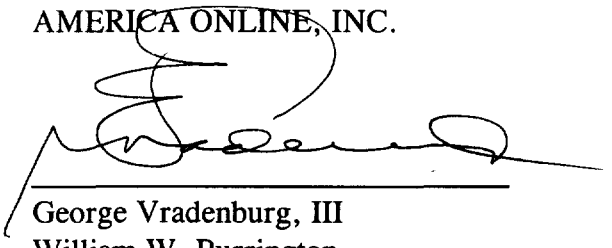
In sum, because TCI itself or through @Home generally controls the currently dominant provider of last-mile broadband data transport service as an input to Internet access offerings in the relevant geographic markets, it enjoys substantial power over the input in these markets which, in turn, reinforces the cable video monopoly. This is true even where TCI faces some competition from other providers using high-speed cable transport or xDSL. It is this type of control over last-mile high-speed data transport capability that has enabled TCI to discriminate in favor of its affiliates in the relevant geographic markets and to tie the purchase of the @Home to the availability of that capability. As discussed above, the merger between AT&T/TCI will serve to accelerate and exacerbate materially these problematic market conditions. Thus, to safeguard consumer choice and the full development of the Internet, the Commission must act now to establish a procompetitive open access condition on the merger before it.

VI. CONCLUSION

For the foregoing reasons, AOL requests that the Commission condition its approval of the AT&T/TCI merger on the provision of open access to the merged entity's cable broadband data transport services.

Respectfully submitted,

AMERICA ONLINE, INC.



George Vradenburg, III
William W. Burrington
Jill A. Lesser
Steven N. Teplitz
AMERICA ONLINE, INC.
1101 Connecticut Avenue, N.W.
Suite 400
Washington, D.C. 20036
(202) 530-7878

CERTIFICATE OF SERVICE

I hereby certify that on this 29th day of October, 1998, I caused copies of the foregoing Comments of America OnLine, Inc., to be hand-delivered or mailed via first-class postage prepaid mail to the following:

Federal Communications Commission
International Transcription Service, Inc.
1919 M Street, N.W., Room 246
Washington, D.C. 20554

Deborah Lathen
Federal Communications Commission
Chief, Cable Services Bureau
2033 M Street, N.W.
Washington, D. C. 20554

Quyen Truong
Federal Communications Commission
Policy and Program Planning Division
Common Carrier Bureau
1919 M Street, N.W., Room 544
Washington, D.C. 20554

Royce Dickens
Federal Communications Commission
Policy & Rules Division, Cable Services Bureau
2033 M Street, N.W., Room 406
Washington, D.C. 20554

Evette Keene
Federal Communications Commission
Video Services Division, Mass Media Bureau
1919 M Street, N.W., Room 712
Washington, D.C. 20554

Karl Kensinger
Federal Communications Commission
Satellite and Radio Communication Division
2000 M Street, N.W., Room 800
Washington, D.C. 20554

Sherille Ismail
Federal Communications Commission
International Bureau
2000 M Street, N.W., Room 800
Washington, D.C. 20554

Walter Strack
Federal Communications Commission
Wireless Telecommunications Bureau
2025 M Street, N.W., Room 5002
Washington, D.C. 20554

Stephen J. Flessner
Director of FCC Compliance
Cable Regulatory Compliance Department
Terrace Tower II
5619 DTC Parkway
Englewood, CO 80111-3000*

Mark D. Schneider
Sidley & Austin
1722 Eye Street, N.W.
Washington, D.C. 20006*

Mark C. Rosenblum
AT&T Corporation
295 North Maple Avenue
Basking Ridge, NJ 07920*

Steven N. Teplitz

* Via First Class Mail

APPENDIX A

Declaration of Professor Jerry A. Hausman

1. I am the MacDonald Professor of Economics at the Massachusetts Institute of Technology (MIT), Cambridge, MA, 02139.

2. I received an A.B. degree from Brown University and a B.Phil. and D. Phil. (Ph.D.) in Economics from Oxford University where I was a Marshall Scholar. My academic and research specialties are econometrics, the use of statistical models and techniques on economic data, and microeconomics, the study of consumer behavior and the behavior of firms. I teach a course in "Competition in Telecommunications" to graduate students in economics and business at MIT each year. The Internet is one of the primary topics of the course. I am also the director of the MIT Telecommunications Economics and Business Research Program. I was a member of the editorial board of the Rand (formerly the Bell) Journal of Economics for the past 13 years. The Rand Journal is the leading economics journal of applied microeconomics and regulation. In December 1985, I received the John Bates Clark Award of the American Economic Association for the most "significant contributions to economics" by an economist under forty years of age. I have received numerous other academic and economic society awards.

I. Summary and Conclusions

3. The market definition question that I consider is whether broadband last mile data transport services are in the same input market as narrowband last mile data transport services. Both types of transport services are an "input," that is, they are combined with access and other services provided by ISPs to create what I will term "Internet service" for end users. To an economist, the issue is whether the price of last mile narrowband data transport constrains the price of last mile broadband data transport. I have considered two econometric approaches to this market definition issue. First, I investigated whether the prices charged for @Home and RoadRunner are affected significantly by the price of last mile narrowband data transport for residential customers provided by local exchange telephone companies (LECs). I also

investigated whether the demand for last mile broadband data transport for residential customers is affected by the price of last mile narrowband data transport. My econometric results demonstrate that last mile broadband and narrowband data transport services are in different input markets.

II. Relationship of Last Mile Broadband Data Transport Prices and Last Mile Narrowband Data Transport Prices

A. Data Used

4. I gathered price data from 22 states and 47 MSOs where @Home and RoadRunner are currently being sold. For cable subscribers the broadband Internet service price varies from $39.95 per month up to $54.95 month.[1] I also considered the installation fee, which varies from $40 to $175. I amortized this installation fee over different periods in various regression specifications, depending on the predicted churn rate for broadband customers.

5. For last mile narrowband data transport I collected data from the LECs providing service in the areas served by the local cable provider.[2] Prices for second telephone lines, used by many AOL customers, varied from $12 to $27 per month.[3] Installation costs for a second line varied from $11 to $46. Again I amortized the installation cost for the second line.

B. Regression Model Specification

6. The regression specifications have the price of broadband Internet service provided by either @Home or RoadRunner as the left hand side variable. The price variable is run in either levels or in logs. The right hand side variables are an intercept, an indicator variable for

---

[1] Prices for non-cable television subscribers are typically $10 per month higher. Consideration of these prices had no significant effect on my results.

[2] These data cover the price of monthly telephone access, not the price to the ISP. While @Home and RoadRunner provide both services in their price, since many ISPs provide national service at a single price (e.g. AOL) the price of ISP service will be included in the intercept coefficient in the regression specification.

[3] For residential customers who do not use a second (or higher) line, the marginal price of access is zero, everywhere but in New York City, so long as a local PAD exists. We used different weighted averages for use of

RoadRunner, and a variable for second line prices from the LEC, either in levels or in logs. Various specifications were estimated corresponding to different definitions and amortization periods for installation costs.

7. In order to acquire Internet service, today's residential consumers combine an input of last mile data transport together with Internet access services provided by an ISP. A given consumer can purchase narrowband last mile data transport from a local exchange carrier and combine the transport input with access and other services provided by an ISP such as AOL or Erols. Alternatively, the consumer can buy a combined (tied) package of last mile broadband (high speed) data transport and Internet access from @Home or RoadRunner, where they operate. In terms of a regression specification, regressing the price of @Home or RoadRunner, which combine last mile data transport and Internet access, on the narrowband Internet service price yields the correct inference because narrowband ISPs, such as AOL, operate in a national market and charge identical prices nationwide. Thus, the price effect of ISPs, such as AOL, on the price of @Home or RoadRunner will be contained in the estimated coefficient for the intercept of the regression specification. The combined effect of the narrowband Internet competition to @Home and RoadRunner will be given by the coefficient of the intercept and the coefficient of the narrowband Internet service price. However, since only the narrowband last mile transport price varies across different geographic regions, the coefficient of this variable permits inferences to be drawn on the price constraining effect of narrowband last mile data transport on broadband last mile data transport.

8. At the current time ADSL prices are 2-5 times higher than narrowband last mile data transport prices, depending on the particular regulatory jurisdiction that sets narrowband last mile data transport prices for residential consumers. Furthermore, a consumer needs to buy a modem to use with ADSL, with the price of the modem typically in excess of $150. ADSL prices vary across states by a significant amount. Although ADSL is just being put into service in many areas so that the prices may change over time, I do not expect ADSL prices to

---

first and second lines in our regression specifications, but the results were not sensitive to the particular weights used.

constrain narrowband last mile data transport prices. Otherwise, price regulation would not be required for residential voice grade lines, a situation that has not yet been reached.

C. Empirical Results

9. The regression findings are quite uniform across different specifications. The estimated coefficient of the last mile narrowband data transport price variable is always estimated to be negative, and is often found to be statistically significant, with an elasticity of about –0.14. Thus, lower last mile narrowband data transport prices do not constrain the prices charged for last mile broadband data transport. If anything we find the reverse result: lower last mile narrowband data transport prices are associated with higher last mile broadband transport prices. I find similar results if I limit the sample to only @Home MSOs. I also find that the RoadRunner indicator variable is about –16%, and highly statistically significant. Thus, RoadRunner is priced significantly below @Home, on average.

10. Thus, I find no support for the hypothesis that last mile narrowband data transport prices constrain last mile broadband data transport prices. To the contrary, I find that lower last mile narrowband transport prices are associated with higher last mile broadband transport prices. I conclude that last mile broadband data transport is not in the same antitrust market as last mile narrowband data transport, based on the relationship of last mile broadband data transport prices with last mile narrowband data transport prices.

III. Relationship of Broadband Internet Service Demand with Narrowband Internet Service Prices

A. Data Used

11. The second econometric study I performed estimated the effect of narrowband access prices on demand for broadband Internet service. In August 1998 AOL computed the number of subscribers to AOL for June and July 1998 for 21 markets in which AOL as well as @Home or RoadRunner are present on a zip code basis. AOL then computed the ratio of July 1998 to June 1998 subscription rates and compared this ratio to markets in which @Home and RoadRunner

are not present. This calculation corresponds (approximately) to the percentage change in AOL penetration rates in areas where AOL and @Home or RoadRunner are present compared to the percentage change in AOL penetration rates where @Home and RoadRunner are absent. The difference of the logs of the two ratios gives the relative performance of AOL in "broadband areas" and non-broadband areas.[4]

B. Regression Model Specification

12. I use this percentage change variable in relative penetration rates as the left hand side variable in a regression specification. One can think of the variable as the demand for broadband Internet service since the lower the performance of AOL in a given area where broadband Internet service is available compared to its performance an area where broadband Internet service is not available, the greater is the demand for broadband Internet service under the hypothesis that the lower performance of AOL is due to the availability of broadband Internet service and other variables we include in the regression specification.

13. As right hand side variables in the regression I included the number of months that @Home or RoadRunner had been offered by the MSO. This variable allows for a "diffusion curve" effect in adoption of broadband Internet service by households. I found that this variable had a large effect on demand with borderline statistical significance.[5] I also included the price of broadband Internet service, which again had a large effect on demand but was not measured precisely. I included the price of narrowband Internet service, and I found that this variable had only a small estimated effect on demand with the incorrect sign and a large estimated standard error.[6] Lastly, an indicator variable for RoadRunner had a large estimated effect. These findings are robust across different regression specifications.

---

[4] This approach is analogous to the "differences in differences" approach that is often used in policy evaluation in economics. The construction of the left hand side variable also allows for fixed effects for each MSO.

[5] Since the data set has 21 observations, the question of statistical significance should be interpreted with this number in mind.

[6] Note that this variable is only the price of last mile narrowband data transport, not the price paid to the ISP. Presumably, the prices paid to ISPs affect demand for narrowband Internet service, but since these prices are the same across MSOs, they do not appear in the regression specification.

C. Empirical Results

14. The interpretation of the regression results is that holding constant the number of months that broadband Internet service has been available in a given geographical area, the price of broadband Internet service has a large effect on the demand for broadband Internet service. However, the price of narrowband Internet service does not have an estimated effect on the demand for broadband Internet service. Thus, the cross price elasticity of the narrowband Internet service price on broadband Internet service is estimated to be essentially zero.[7] However, I do find that the position of the RoadRunner demand curve is farther from the origin than the @Home demand curve so that for a given price, RoadRunner has a higher penetration. Non-price reasons, such as better marketing of RoadRunner than of @Home, would presumably explain the difference in the position of the demand curves.

15. My finding that the price of narrowband Internet service does not affect the demand for broadband Internet service again implies that last mile broadband data transport pricing is not constrained by the pricing of last mile narrowband data transport. Thus, I conclude that last mile broadband data transport and last mile narrowband Internet data transport are in different input markets.

I declare under penalty of perjury that the foregoing is true and accurate.
Executed on October 28, 1998 in Cambridge, Massachusetts.

J. C. Hausman Oct 28, 1998

Jerry A. Hausman

[7] Equivalently stated, a small change in the price of narrowband Internet service in a given geographical area will not have a significant demand on the demand for broadband Internet service. So if a state PUC were to raise monthly last mile data transport fees by $1.00 per month, I would not expect a significant change in the quantity demanded of broadband access.

APPENDIX B

Declaration of Professor Jerry A. Hausman

1. I am the MacDonald Professor of Economics at the Massachusetts Institute of Technology (MIT), Cambridge, MA, 02139.

2. I received an A.B. degree from Brown University and a B.Phil. and D. Phil. (Ph.D.) in Economics from Oxford University where I was a Marshall Scholar. My academic and research specialties are econometrics, the use of statistical models and techniques on economic data, and microeconomics, the study of consumer behavior and the behavior of firms. I teach a course in "Competition in Telecommunications" to graduate students in economics and business at MIT each year. The Internet is one of the primary topics of the course. I am also the director of the MIT Telecommunications Economics and Business Research Program. I was a member of the editorial board of the Rand (formerly the Bell) Journal of Economics for the past 13 years. The Rand Journal is the leading economics journal of applied microeconomics and regulation. In December 1985, I received the John Bates Clark Award of the American Economic Association for the most "significant contributions to economics" by an economist under forty years of age. I have received numerous other academic and economic society awards.

3. I have done significant amounts of research in the telecommunications industry. My first experience in this area was in 1969 when I studied the Alaskan telephone system for the Army Corps of Engineers. Since that time, I have studied the demand for local measured service, the demand for intrastate toll service, consumer

demands for and consumer benefits from new types of telecommunications technologies and services, marginal costs of local service, costs and benefits of different types of local services, including the effect of higher access fees on consumer welfare, and consumer demands for new types of pricing options for long distance service. I have also studied the effect of new entry on competition in paging markets, telecommunications equipment markets, and interexchange markets. Other areas of telecommunications in which I have recently performed research include the cellular telephone industry and the information services industry. I have also edited two books on telecommunications, Future Competition in Telecommunications (Harvard Business School Press, 1989) and Globalization, Technology and Competition in Telecommunications (Harvard Business School Press, 1993). My two most recent academic papers on telecommunications are "Valuation and the Effect of Regulation on New Services in Telecommunications", Brookings Papers on Economic Activity, Microeconomics 1997, and "Taxation By Telecommunications Regulation", forthcoming in Tax Policy and the Economy, 1998.

4. I have submitted numerous declarations to the FCC regarding telecommunications regulation. I have previously submitted affidavits regarding the exercise of monopoly power by cable operators and competition provided by DBS. Here, I have been asked by AOL to consider the tying practice by cable operators where a consumer who buys last mile broadband (high speed) data transport is also required to purchase @Home Internet access and other services from his cable operator.

I. Summary and Conclusions

5. The Commission, as well as the DOJ, FTC, and numerous academic papers, has determined that cable operators exercise significant amounts of monopoly power. Cable prices have risen by significant amounts relative to general inflation or changes in telecommunications price indices over the past 3 years. DBS and other multi-channel programming distribution networks have not constrained the exercise of monopoly power by cable operators.

6. Cable companies have claimed to the Commission that they will not find it economical to invest in last mile high speed data transport unless they are able to exercise monopoly power through tying @Home's Internet access and other services with last mile high speed data transport. They are currently tying the purchase of last mile high speed data transport by residential customers to the purchase of @Home's Internet access and other services. The result will be higher prices to consumers due to the exercise of monopoly power and decreased choices to consumers. This decrease in consumer welfare and distortion of competition is not in the public interest.

II. Monopoly Power and the Exercise of Monopoly Power by Cable Operators

A. Definition and Goal of Exercising Market Power

7. Common agreement exists on the definition of market power. Market power is the ability to maintain prices above competitive levels for a significant period of time in a profitable manner. This definition is used in the Department of Justice and Federal Trade Commission Horizontal Merger Guidelines (MG), April 1992, ¶ 0.1. The same definition

is found in economics textbooks and in law review articles that discuss principles of antitrust.[1]

8. Firms attempt to exercise market power in order to increase their profits. The goal of a firm is to maximize shareholder value, which is the present discounted value of future expected profits. Thus, if a firm attempts to raise price or to exclude competition, it is with the goal of increasing profits now and in the future.

B. Cable Operators Are Currently Exercising Monopoly Power

9. The Commission has found numerous times that cable operators have and exercise monopoly power in the market for multichannel video programming distribution. The latest such finding was in the Commission's most recent Annual Cable Competition Report.[2] Economists, government regulators, and Congress have also concluded that cable operators have market power and have engaged in various anti-competitive actions. In particular, authors of a number of articles published in economic journals, economists at both the DOJ and FTC, and my own analysis have determined that cable operators' prices to consumers reflect the exercise of monopoly power, defined as the ability to price above competitive levels for extended periods of time. The FCC's Cable Report confirms the continued existence of significant market power by local cable operators:

---

[1] *See e.g.* D.W. Carlton and J.M. Perloff, Modern Industrial Organization, Scott, Foresman, 1990, p. 8, and W. Landes and R. Posner, "Market Power in Antitrust Cases", Harvard Law Review, 94, 1981, p. 937.

[2] *Annual Assessment of the Status of Competition in Markets for the Delivery of Video Programming,* CS Docket No. 97-141, FCC 97-423 (rel. January 13, 1998) (*"Cable Competition Report"*).

> In all but a few local markets for the delivery of video programming, the vast majority of consumers still subscribe to the service of a single incumbent cable operator. The resulting high level of concentration, together with impediments to entry and product differentiation, mean that the structural conditions of markets for the delivery of video programming are conducive to the exercise of market power by cable operators.[3]

DBS has provided some marginal competition to cable in the past few years. However, DBS has not provided an effective constraint to cable operators' exercise of monopoly power. Similarly, while over the air broadcasting and video cassettes do compete to some extent with cable programming, they are not close enough substitutes to hold down cable prices to competitive levels.[4]

10. Recent empirical evidence demonstrates the continued exercise of monopoly power by cable operators. The Bureau of Labor Statistics Consumer Price Index measure for cable subscription prices has increased by over 7.0% per year over the past three years (through 9/30/98). This rapid rate of price increase should be compared to the general CPI inflation rate of 2.2% per year and the local telephone price increase of 1.1% per year. Thus, cable rates have increased over three times as fast as general inflation. Furthermore, the cable price increase has occurred while the price of DBS has decreased over the same period.[5] Thus, DBS has not provided a significant price constraint to cable.[6]

---

[3] *Cable Competition Report,* para. 128. See also id, para. 1238, Separate Statement of Chairman Kennard, who stated, "It is clear that broad-based, widespread competition to the cable industry has not developed and is not imminent."

[4] Other potential MVPD competitors such as VDT systems, MMDS providers, SMATV systems, TVRO providers, and LMDS systems have not provided effective competition to cable operators.

[5] No BLS price index exists for DBS. However, increased equipment discounts have led to a price decrease for DBS. The Dish Network has been very aggressive in terms of equipment prices. See http://www.dishnetwork.com/home/index.html.

11. Further indications of the exercise of monopoly power by cable operators exist in prices quoted by companies attempting to "overbuild" cable networks. RCN, based in the Boston area, offers cable programming service along with last mile high speed data transport. It offers cable service at prices about 21%-34% less than local cable operators.[7] This discount is within the range that the Commission has found previously for discounts offered by overbuild networks. Local cable companies in the Boston area have petitioned the Massachusetts DPU in an attempt to exclude further entry and expansion by RCN beyond the two cities in which RCN currently operates.[8] However, to the extent that a new entrant such as RCN charges significantly lower prices for comparable service and the incumbent attempts to exclude its entry, an inference regarding the existence and exercise of monopoly power follows.[9]

III. Cable Operators Currently Tie Last Mile High Speed Data Transport to Internet Access and Other Services

12. A number of cable operators currently offer last mile high speed data transport at speeds in the range of 5-10 MBPS. This speed is significantly higher than commonly available options for residential customers using the ILECs' networks with

---

[6] Given that DBS prices have decreased, cable operators' statements that increased programming costs are the cause of increased cable prices are questionable, given that DBS buys much of the same programming. Furthermore, because of vertical integration cable companies control both programming prices and cable subscription prices.

[7] Actually, for this difference in price RCN offers approximately 52% more channels, so the actual price difference per channel (used as an approximation) would be about 32%-52% lower. For information see <http://www.ultranet.com/~preview/rcn/cable.html.>.

[8] The cable companies claim a cross subsidy by RCN's partner, Boston Edison, the regulated electricity transmission company.

[9] This inference follows because cable companies prices are not set artificially high by regulation. Sometimes regulators set price above the competitive level due to regulatory goals.

either modems or via xDSL.[10] However, the cable companies affiliated with @Home only sell the last mile high speed data transport as a tied product with @Home Internet access and other services. Thus, a residential customer must buy both the last mile high speed data transport and the Internet access and other services provided by an ISP together. If a customer wants to use another ISP, say AOL, he would have to pay for both @Home ISP service and again for AOL ISP service. This restriction on consumer choice by cable companies meets the economic definition of tying two different products together (for which there are separate demands), since they cannot be purchased separately. The price of @Home (including both last mile transport and Internet access) is $39.95 per month.

13. Bundling, where consumers have the choice to buy the services separately or together, as with wireless telephones and wireless service, is often pro-competitive as the Commission has found previously. However, cable companies affiliated with @Home are not bundling, rather they are tying, since they do not permit consumer choice.

14. In the Boston area RCN offers last mile high speed data transport at $17.95 per month. A subscriber can then separately choose an ISP service. RCN charges $19.95 for Erols ISP, owned by RCN, but the consumer can also choose other ISPs such as AOL. Thus, for a lower price or approximately the same price, a consumer in Boston in an area served by RCN is able to buy bundled last mile high speed data transport and ISP service from RCN, or the consumer can last mile buy high speed data transport and ISP service

[10] The cable speed also exceeds the current speed of most xDSL that ILECs are beginning to deploy. Moreover, the market success of xDSL and its ability to constrain the cable companies' ability to exercise monopoly power over last mile high speed (broadband) data transport is highly uncertain.

separately. Thus, consumer welfare is increased by the bundled offering. Similarly, consumer welfare would be increased if the Commission disallowed the tying of last mile high speed data transport and Internet access and other services currently being enforced by TCI through its affiliate @Home.

IV. Cable Companies Do Not Require Tying to Invest in their Networks

15. Cable companies, in their comments to the Commission, have unsurprisingly stated that they require a tied service offering in order to invest in upgrading their cable plants. TCI's comments are typical:

> "Those who call for imposing new regulatory burdens on cable networks would turn cable plant into a commodity and remove cable operators' incentives to invest the billions of dollars necessary to add interactivity and other capabilities to cable systems, contrary to the goals of Congress and this Commission. It does not make economic or business sense for TCI to risk billions of dollars upgrading its networks if the government requires the company to provide the benefits of its network investment to competitors who are unwilling or unable to make similar investments." (Reply Comments of TCI, Section 706 NOI, CC Docket 98-146, Oct. 8, 1998, pp. 12-13)[11]

Thus, TCI states that it should be permitted to continue to exercise monopoly power or it will not have the incentive to invest. It is stating that the Commission should exempt it from normal competitive principles so it will invest in its network.

16. TCI's argument does not make economic sense. No one has called for price regulation of last mile high speed data transport by TCI and by other cable companies. TCI could still charge the (unregulated) profit maximizing price for last mile high speed

[11] @Home makes an identical statement. Reply Comments of At Home Corporation, Oct. 8, 1998, p. 14.

data transport over its network. For instance, @Home currently pays a fee to the local cable provider that provides last mile high speed transport. TCI and other cable providers could charge AOL similar prices for last mile high speed transport.

17. TCI could also still offer a bundled service with @Home Internet service. However, TCI and other cable companies would not be allowed to tie their last mile high speed data transport with @Home service. Instead, consumers would have the choice of their ISP access. Investment incentives would still exist for TCI and other cable companies to upgrade their networks. Cellular companies, for example, have spent billions of dollars upgrading their networks while bundling (but not tying) service with equipment. Thus, the limitation on consumer choice and the competitive distortion caused by tying would be eliminated.

18. AT&T, which has announced plans to buy TCI, and thus will pay for the capitalized future expected monopoly profits from TCI's cable operations, also favors continued tying by TCI and other cable companies.[12] AT&T states that:

> "... cable providers will be required to invest billion of dollars to upgrade their networks—an economic and technological risk that cable companies will not undertake if they would then have to provide unbundled access to those upgraded facilities to third parties whose business plans did not include the development and deployment of advanced infrastructure." (Reply Comments of AT&T, Section 706 NOI, CC Docket 98-146, Oct. 8, 1998, p. 15).

Now that AT&T is re-entering the monopoly power business through its purchase of monopoly cable providers and paying a large premium on TCI's stock for TCI's expected

[12] TCI and other cable companies also own a significant share of @Home.

future monopoly profits, it realizes that economic and technological risks exist in upgrading networks. Nevertheless, it continues to try to require the ILECs to make similar investments in upgrading their networks and to sell access at TELRIC, which is well below the economic cost of the investment, given the sunk and irreversible nature of the investment.[13] However, no one is calling for the cable companies to be required to sell last mile high speed data transport at prices determined by TELRIC. Instead the Commission should end the current tying arrangements used by cable companies—similar to the decision by the Commission to end AT&T's practice of tying telephone equipment to telephone service in the 1970s. Consumers benefited from that decision and they would benefit in a similar way by increased choice in the current situation.

19. In terms of the anti-competitive effects of tying on consumers, Cablevision Systems comments are quite revealing:

> "In this regard, AOL's argument is not unlike the argument sometimes heard that stripping inventors of patent protection would actually spur the dissemination of new inventions, for without patent protection, more people would be allowed to manufacture and sell new inventions. But such an argument utterly ignores that unless inventors can be assured that they will be able to retain the fruits of their success, they will not have any incentive to create inventions in the first place." (Reply Comments of Cablevision Systems Corp., Section 706 NOI, CC Docket 98-146, Oct. 9, 1998, pp. 4-5).

Thus, Cablevision is stating that inventors should be allowed to tie their inventions to other products or services so that their profits will increase, which in turn increases the

---

[13] For further discussion of the effects of TELRIC on new investment, see Jerry Hausman, "Valuation and the Effect of Regulation on New Services in Telecommunications," Brookings Papers on Economic Activity: Microeconomics, 1997.

incentive to invest. However, Cablevision fails to realize that it is well-settled patent law that the patent owner can charge the profit maximizing price for the use of his invention, but the patent owner cannot tie the use of the patented product to other goods or services.[14] Indeed, tying is often taken to be patent misuse and can provide grounds for revocation of the patent. Thus, Congress has determined that a patent grant is necessary to increase innovation, but Congress has not repealed the antitrust laws so that a patent holder can increase his returns and presumably cause even more innovation.

20. Neither Cablevision nor other cable companies nor AT&T has considered the public interest tradeoff between the exercise of monopoly power and consumer welfare. Tying has never been considered necessary for the socially optimal level of innovation in the U.S. economy. Cablevision provides no analysis in its Reply Comments that demonstrates why anti-competitive tying is required in the current situation. Instead, a Commission rule that permits bundling of last mile high speed data transport service and ISP service, but does not permit tying of these services, will provide sufficient investment incentive for cable companies to upgrade their networks, while allowing for consumer choice and increased consumer welfare. The public interest would be served by such a rule.

---

[14] I state this premise as an economist who has participated in a number of patent proceedings that had

I declare under penalty of perjury that the foregoing is true and accurate.

Executed on October 28, 1998 in Cambridge, Massachusetts.

J A Hausman Oct 28, 1998

Jerry A. Hausman

related antitrust claims.

APPENDIX C

DECLARATION OF SUK S. SOO

I, Suk S. Soo, hereby declare as follows:

1. My name is Suk S. Soo and I am Vice President - Special Projects for AOL Technologies. I am responsible for the technical assessment of various broadband platforms as they relate to the business interests of America Online, Inc. ("AOL").

2. I joined AOL in February, 1998. Prior to that time, I was Vice President of ANS Communications, a wholly-owned subsidiary of AOL until it was sold to WorldCom in 1998, and I oversaw the build-out of the ANS portion of AOLnet. Prior to joining ANS in 1993, I had a 30-year career at IBM Research Division, holding various senior technical and management posts, including being appointed a member of IBM's Corporate Technical Committee. During my tenure at IBM, I authored in 1986 the successful bid by IBM, MCI, and Merit for building the NSFnet, the precursor to the modern Internet.

3. The network and systems infrastructure deployed by the cable industry for broadband IP services over the Hybrid Fiber Coax access plant is based on open, interoperable standards. Under the sponsorship of Cable Labs, the cable industry technical organization, a "de-facto" set of standards has been issued. Collectively known as the *Data-Over-Cable Service Interface Specification (DOCSIS)*, these standards can be referenced at http://www.cablemodem.com.

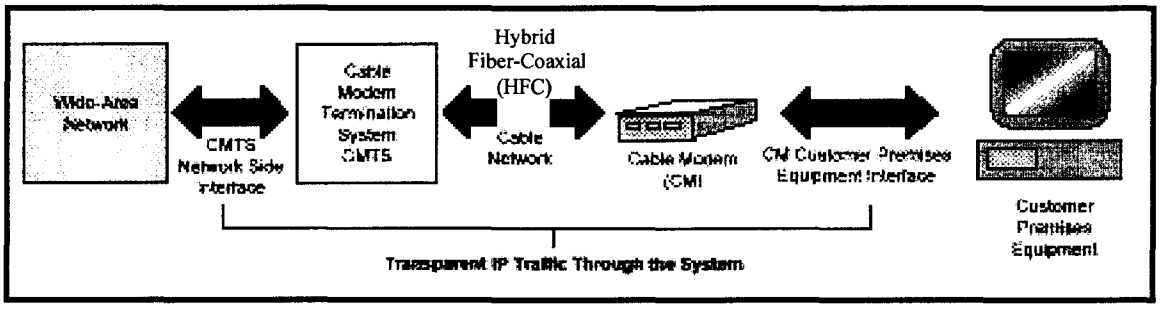


Figure 1-1. Transparent IP Traffic Through the Data-Over-Cable System

A simplified representation of the Data-Over-Cable infrastructure is shown in Figure 1-1, as abstracted from the DOCSIS documentation. The transmission path over the cable system is realized at the headend by a Cable Modem Termination System (CMTS), and at each customer location by a Cable Modem (CM). At the headend (or hub), the interface to the data-over-cable system is called the Cable Modem Termination System - Network-Side Interface (CMTS-NSI) and is specified in

[DOCSIS SP-CMTS-NSII01-960702]. The interface of the CMTS to the HFC network is specified by [DOCSIS SP-RFI-I04-980724]. At the customer location, the interface is called the cable-modem-to-customer-premises-equipment interface (CMCI) and is specified in [DOCSIS SP-CMCI-I02-980317]. The intent is for MSOs to transparently transfer IP traffic among these interfaces.

4. There are many possible points where multiple Service Providers can interface to the cable system on an open access basis. We will treat herewith the interface at the CMTS-NSI, as a demonstration of how this open access can be implemented.

- **HFC configuration**
  From the CM to the CMTS there will be no change in implementation between a system built for a single Service Provider and a system that is open to multiple Service Provider access since the HFC medium is shared by all. More specifically, any capacity issues that might arise will be a function of the total number of subscribers of the data-service, and not a function of the number of Service Providers.

- **Data link and Physical access**
  There are several standard communications interfaces specified at the CMTS-NSI, *e.g.*, ATM over DS3 or Ethernet over 100BASE-T. Each Service Provider that desires access over the cable plant to the end-user must interface through these standard mechanisms at the cable head-end where the CMTS is located. The specific choice of the mechanism will be a function of the selection made by the CMTS owner. No change to the existing physical configuration will be required. The number of Service Providers that can be accommodated is limited only by the number of ports made available at the CMTS-NSI, which in theory is unlimited, and in practice probably more than the number of Service Providers that will choose to obtain access.

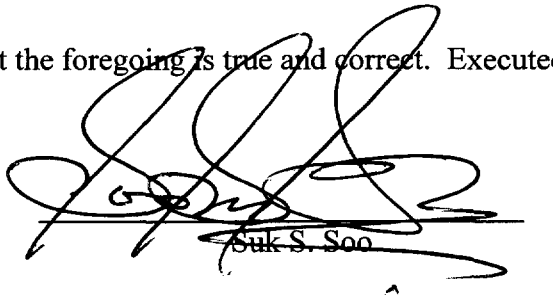
  Once such a link is established, any end-user has a physical and logical path available to access the Service Provider. In addition, however, proper addressing routing configuration (a software task) must be established for multiple Service Providers so that each customer will be able to select the Service Provider of choice.

- **Addressing Routing Configuration.**
  The IP addressing and routing must be configured to direct the traffic to the appropriate gateway router and backbone network of the designated Service Provider of the customer, through the data link at the CMTS-NSI interface. There are many ways to achieve the required addressing and routing configuration to support multiple Service Providers. We illustrate, by example, one approach.

IP addressing and routing configuration (example of a solution)	
Unitary Service Provider	**Multiple Service Providers**
Initial setup (static, at provisioning, or dynamic, at session log-in)	
1) CM establishes connectivity and registers with CMTS.	1) CM establishes connectivity and registers with CMTS.
2) PC (TCP/IP stack) broadcasts DHCP request, including source identifier (e.g., PC MAC address).	2) PC (TCP/IP stack) broadcasts DHCP request, including source identifier (e.g., PC MAC address).
3) CMTS receives requests, and relays it to the DHCP server.	3) CMTS receives requests, and relays it to the DHCP server.
4) DHCP server looks up available IP addresses.	4) DHCP server looks up available IP addresses, *per each Service Provider configuration as indicated by source identifier.*
5) DHCP server responds, including assigned IP address for PC.	5) DHCP server responds, including assigned IP address for PC, *and gateway router address corresponding to customer's Service Provider.*
6) CMTS relays response to PC.	6) CMTS relays response to PC, *but first stores gateway router address indexed by source identifier.*
5) PC configures its TCP/IP stack with IP address from Service Provider block.	5) PC configures its TCP/IP stack with IP address from *customer's Service Provider* block.
Traffic flow (customer activity)	
1) PC (TCP/IP stack) generates traffic through CM to CMTS.	1) PC (TCP/IP stack) generates traffic through CM to CMTS.
2) CMTS routes traffic to the next hop gateway router.	2) CMTS routes traffic to the *appropriate next hop gateway router based on table lookup from source identifier.*
3) Return traffic comes to gateway router (recognized by source IP address), through CMTS to CM.	3) Return traffic comes to *appropriate Service Provider gateway router (recognized by source IP address)*, through CMTS to CM.

The required changes to support multiple Service Providers are straightforward: configuration of the DHCP server to store the table of IP address blocks by Service Provider and by source identifier, and the configuration of the CMTS to store the table of next-hop gateway router addresses by source identifier. While there will be other solutions that may be better tailored to specific implementation details, it is clear that there are technical solutions for the proper IP addressing and routing configuration to support customer choice among multiple Service Providers.

5. I declare under penalty of perjury that the foregoing is true and correct. Executed on this 29th day of October, 1998.



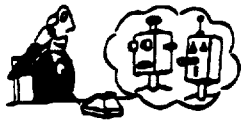
APPENDIX D

THE NEW YORKER

THE TALK OF THE TOWN

BRAVE NEW WORLD DEPT.

How the A.T. & T. deal will help John Malone get into your house.



A YEAR ago, John Malone was Dead Man Walking, the subject of headlines like "HIGH NOON FOR JOHN MALONE . . ." (*Fortune*) and "THE DISMANTLING OF AN EMPIRE?" (*Business Week*). Malone is the chairman and C.E.O. of Tele-Communications Inc., the nation's most potent cable company, and the firm was saddled with debt and an antique infrastructure. In 1994, the financial press agreed, Malone made a mistake when he wiggled out of a merger with Bell Atlantic.

Those who know Malone often use the word "wiggle." They think that he schemes rather than sleeps. Somehow, they believe, he will always land upright. And on June 24th he did. That was when Malone and C. Michael Armstrong, the chairman and C.E.O. of A.T. & T., announced that the telephone giant was acquiring T.C.I. for forty-eight billion dollars—an eight-and-a-half-billion-dollar premium over its market value.

John Malone

On Wall Street, Malone (whose personal wealth grew by nearly two billion dollars) was given more credit for an exit strategy than Armstrong was given for a business plan; cable stocks rose and A.T. & T. fell. In his nine months at A.T. & T., Armstrong has explored ways to transform the company. Just weeks before the T.C.I. deal, he had tried to purchase America Online; Malone's company was his second choice. "There is a slight air of desperation about Armstrong," a key AOL figure says. "This deal can be construed as happenstance rather than strategy."

What is not happenstance is the scheme Malone sold to Armstrong: to transform a long-distance telephone firm into a multimedia telephone and cable company with potentially exclusive access to the Internet. News reports noted that an Internet link was one of Armstrong's objectives, but it was more than that: it was an obsession.

In a telephone interview last week from his Denver office, Malone revealed that the linchpin of the merger was a new network-services company, @Home, which has only a hundred thousand customers. @Home permits access to the Internet, using cable-television wires, that is often a hundred times faster than is possible on an ordinary phone line.

"It was the scent gland of the deal," Malone told me. The scent gland? "The sine qua non is high-speed Internet access." Malone's T.C.I. owns thirty-nine per cent of @Home, but the value of @Home represented only about three percent of the T.C.I.-A.T. & T. deal.

Anyone familiar with the Internet knows how long it takes to get on-line and to browse using a standard phone line; for years, businesses have been racing to find a way to make the connection faster—to create a sort of digital Panama Canal. Malone and Armstrong, like many others, are betting that a TV cable is the best way to provide a quicker hookup.

Unless a high-speed telephone or other connection is invented, @Home and Time Warner's version (called Road Runner) are poised to become the electronic gateway to the Internet. Malone prefers to call it a "unique transport." "AOL provides content and transport," he says. "They need to subscribe to our network to get to their customers at high speed. They have to go through us." Going "through us" has been cable's game, but the Internet and satellites have diminished its gatekeeping powers. Now Malone foresees a new gatekeeper role, with the whole cable industry aligning with A.T. & T. to form a single giant network. The plan is still a gamble, however. Businessmen are all just guessing that consumers will pay forty dollars a month for a cable modem.

In the meantime, John Malone is enjoying his escape. He plans to be an active A.T. & T. director, but he says, "If A.T. & T. feels I'm getting in the way, I'll gracefully get out of the way."

—KEN AULETTA

ILLUSTRATIONS BY TOM BACHTELL